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ABSTRACT

Education in the clinical laboratory sciences in Kentucky and articulation within the field are examined, based on the Kentucky Allied Health Project (KAHP), which designed an articulated statewide system to promote entry and exit of personnel at a variety of educational levels. The KAHP model promotes articulation in learning, planning, and resource allocation. Information is presented on the history of the clinical laboratory sciences (CLS) profession, educational programs, accreditation, and regulatory practices. Accomplishments of the CLS Discipline Advisory Group include the following: identifying roles and functions for three levels of CLS practitioners using Bloom's taxonomy; developing objectives at the basic and advanced levels in the areas of hematology, immunohematology, microbiology, immunology, and clinical chemistry/urinalysis; developing a model articulated curriculum; surveying medical laboratory technician students and graduates to determine interest in articulation; developing a CLS brochure for educators; surveying hospitals and private laboratories in Kentucky regarding manpower demand; and negotiating transfer agreements among colleges. The use of the Program Evaluation and Review Technique is also addressed. Various transfer agreements are appended, along with information on the CLS programs offered at Kentucky institutions. (SW)

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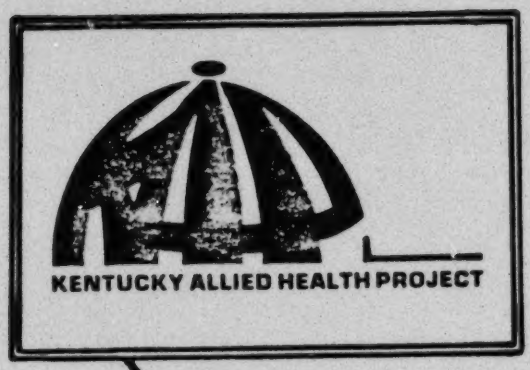

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STATE SYSTEM FOR ALLIED HEALTH EDUCATION

CLINICAL LABORATORY SCIENCES

KENTUCKY ALLIED HEALTH PROJECT

CLINICAL LABORATORY SCIENCES

DISCIPLINE ADVISORY GROUP

FINAL REPORT

Commonwealth of Kentucky
Council on Higher Education
Frankfort, Kentucky 40601

Harry M. Snyder
Executive Director

June, 1982

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SUMMARY

The major goal of the Kentucky Allied Health Project (KAHP) was to design an articulated statewide system permitting entry and exit of prepared personnel at a variety of educational levels. Six disciplinary clusters were included in the project:

(1) clinical laboratory sciences

(2) dental auxiliaries

(3) dietetics/nutrition

(4) radiological sciences

(5) rehabilitation therapies

(6) respiratory therapy.

Highlights of the accomplishments in clinical laboratory sciences (CLS) during the project period were:

1. Delineation of Roles and Functions for the three levels of CLS practitioner. Utilizing Bloom's taxonomy, expected levels of achievement were assigned to each level of practitioner in the cognitive, psychomotor and affective domains for each of the six areas covered. The resultant Matrix was used as a guide for the model curriculum development that followed.

2. Development of Objectives for Clinical Courses. The Roles & Functions Matrix along with competency statements developed by the American Society for Medical Technology were the basis for the development of objectives at the basic and advanced levels in the areas of hematology, immunohematology, microbiology, immunology and clinical chemistry/urinalysis. These objectives were evaluated by 63 practitioners in 28 hospitals and 24 educators at 13 educational institutions.

3. Development of a Model Articulated Curriculum. Based on the Essentials and the objectives developed, a model articulated curriculum was developed in a "building block" fashion.

4. Completion of Current MLT Student and Graduate MLT Articulation Interest Surveys. The surveys revealed that 80% of current MLT students and graduate MLTs would be interested in articulation if career ladders existed. The most often cited ultimate career goal of both groups was performing laboratory tests at the bench. The reasons most often listed by graduates for not being currently enrolled in a four year program were location of programs and financial reasons.

5. Development of a Clinical Laboratory Sciences Brochure. A brochure was developed, printed and distributed to educators across the Commonwealth for purposes of information, dissemination, & recruitment. Those programs working on articulation were specifically indicated.

6. Completion of a CLS Manpower Study. All the hospitals and private laboratories in the Commonwealth were surveyed in order to get information regarding manpower demand as well as educational profiles. An econometric model for forecasting demand will be developed based on data collected.

7. Negotiation of Transfer Agreements. The following transfer agreements were developed:

From	To
Madisonville Area Vocational Technical School Medical Laboratory Technician Program (C)	University of Kentucky Medical Technology Program (BS)
Madisonville Area Vocational Technical School Medical Laboratory Technician Program (C)	University of Louisville Medical Technology Program (BS)
Madisonville Area Vocational Technical School Medical Laboratory Technician Program (C)	Madisonville Community College Associate in Science Program (AD)
Murray State University Medical Laboratory Technician Program (AD)	Eastern Kentucky University and St. Joseph Hospital Medical Technology Programs (BS)
Murray State University Medical Laboratory Technician Program (AD)	University of Kentucky Medical Technology Program (BS)
Murray State University Medical Laboratory Technician Program (AD)	University of Louisville Medical Technology Program (BS)
University of Kentucky Community College System Medical Laboratory Technician Program (AD)	Eastern Kentucky University and St. Joseph Hospital Medical Technology Programs (BS)
University of Kentucky Community College System Medical Laboratory Technician Program (AD)	Morehead State University and St. Joseph Hospital Medical Technology Programs (BS)

From	To
University of Kentucky Community College System Medical Laboratory Technician Program (AD)	University of Kentucky Medical Technology Program (BS)
University of Kentucky Community College System Medical Laboratory Technician Program (AD)	University of Louisville Medical Technology Program (BS)
University of Kentucky Community College System Medical Laboratory Technician Program (AD)	Western Kentucky University and St. Joseph Hospital Medical Technology Programs (BS)
Watterson College Medical Laboratory Technician Program (AD)	Eastern Kentucky University and St. Joseph Hospital Medical Technology Programs (BS)
Watterson College Medical Laboratory Technician Program (AD)	University of Kentucky Medical Technology Program (BS)
Watterson College Medical Laboratory Technician Program (AD)	University of Louisville Medical Technology Program (BS)
Eastern Kentucky University Medical Laboratory Technician (AD)	University of Kentucky Medical Technology Program (BS)
Midway College Medical Laboratory Technician (AD)	University of Kentucky Medical Technology Program (BS)

8. Inhouse Articulated Curriculum. An articulated curriculum has been developed and approved for the Medical Laboratory Technician and Medical Technology programs at Murray State University.

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1 PROJECT OVERVIEW

Setting for the Project

The Kentucky Council on Higher Education, a statewide coordinating board, was awarded a grant in 1978 from the U.S. Department of Health and Human Services to develop a statewide system for allied health education. To adequately describe the development of KAHP, a brief description/definition of the purposes and functions of coordinating boards will be presented.

Kentucky Higher Education and Kentucky State Government are by necessity linked together, sometimes as adversaries, sometimes as partners. Sandwiched between the public colleges, universities and state government is the Kentucky Council on Higher Education, a statewide coordinating board.

The Council is one of the country's oldest higher education coordinating agencies (1934); however, until it was strengthened in 1966 and again in 1972, it had little authority with which to perform its coordinating responsibilities.

In the 1970's the Commonwealth, through the Council on Higher Education and with the full cooperation of the universities, took the initial steps toward the development of a system of higher education. A 1976 Council report, Kentucky and Comprehensive Planning for Higher Education, states:[1]

> Although Kentucky has a great variety of public institutions, they are not organized into a cooperative system through a coordinated balance of programs, through consideration of unnecessary duplication or overlapping responsibilities....

In 1977, the adoption of mission statements was aimed at organizing a system of higher education. The Council stated that the system was to promote "quality education and research, efficient use of resources, effective communications and smooth movement of students between institutions." The Kentucky Allied Health Project (KAHP) was conceived and designed as a sub-system within this total system. As a sub-system for allied health education, KAHP would strive for both efficient utilization of resources and the development of smooth movement of students between institutions.

The publication entitled "A System of Higher Education in Kentucky Including Mission Statements" presents several characteristics of this system.[2] Two characteristics which directly relate to the goals of the Kentucky Allied Health Project are:

1. "Centralized coordination of program offerings at all levels and among all institutions."
2. "Recognition of and program articulation with the vocational schools in implementing the 'career lattice' concept in post-secondary education."

For a statewide system of higher education to function smoothly, policy decisions must be made that support the characteristics of the system. Each institution must support the system's development. In a system of higher education, one of the central requirements is cooperation between and among institutions.

The Council's belief in and support of a higher education system provided the conceptual framework for KAHP. All curriculum decisions were entirely the responsibility of the cooperating faculty and institutions. In fact, because the Council views academic freedom as a universal and

absolute concept, the success or failure of KAHP was directly related to the institutional faculties. These faculties had to support the philosophy of articulation, be willing to engage in curriculum experimentation and to not only consider the needs of their respective institutions but the needs of the state as a whole. Some faculties did this with great success and a sense of commitment to students from all levels of higher education and all types or institutions (i.e., vocational, private, public, and proprietary); other faculties clung to professional and personal vested interests and were unable to respond to state and/or institutional needs.

The Council's willingness to respect and recognize the claims of academic freedom and procedural autonomy and the institution's equal willingness to recognize the state's right to participate in statewide planning for allied health education contributed to some of KAHP's success. These cooperative attitudes resulted from the fact that the formal structure brought the institutions and the Council together as partners in a joint venture firmly believing in shared group decision making and leadership.

Purpose of the Project

The purpose of the Kentucky Allied Health Project (KAHP) is to use the resources available to develop and implement a model articulated system of allied health education. The articulated system is viewed in the broadest sense to include articulation in learning (i.e., plans to permit a smooth transition from one education level to another) and articulation in educational planning and resource utilization. There are currently 105 allied health programs in Kentucky, seventy-two (72) of these programs are offered by the public sector. Allied health activities have significantly increased the interinstitutional cooperation and coordination among these programs.

Significance of the Kentucky Allied Health Project

Allied Health education programs in the 1960s underwent a significant growth phase fueled by federal monies from the Allied Health Professions Act of 1966. The funding stimulated the coalescence of many programs into schools of allied health professions in a collegiate or university setting. These schools expanded their student enrollments to fill the proliferating programs which represented a response to the nation's diverse health manpower needs.

However, curtailment of direct federal funding coupled with greater governmental demands for fiscal accountability in the late 1970s and early 1980s led to such events as program moratoria and a closer scrutiny of the fundamental goals and objectives of these schools.

While the development of allied health education has been characteristically segmented, the impact on the management of education for the 1980s mandates activities that are collaborative and articulated. Can allied health education in Kentucky, faced with such driving forces as shrinking economic resources, demands for accountability in costs, productivity and outcomes and changes in major technologies, meet these challenges?

In an attempt to meet these challenges, the Commonwealth of Kentucky has proposed the development of a statewide system for allied health education. This system interlocks segmented educational components into a comprehensive structure. The system is based upon three major social concerns:

(1) The concern to meet the needs of the patient.

Many driving forces are pressing for new approaches to allied health education which will culminate in a comprehensive system of care for the patient. If the goal of comprehensive care is to be

achieved, there must be meaningful collaborative arrangements.

(2) The concern to meet the needs of students.

Students are seeking mechanisms for career mobility. A system of allied health education must be developed to help meet these needs. Much of the research on vocational choice and career mobility strongly support a flexible system of education with several entry and exit points. The goal of Kentucky's system of allied health education is to eliminate any unnecessary duplication or artificially imposed barriers that inhibit the ability or motivations of the individual.

(3) The concern to slow the spiraling cost of health care.

Allied health education cannot continue to operate oblivious to the cost to the patient. Allied health educators must recognize and find solutions to the problems of (1) eliminating unnecessary program duplication, (2) avoiding overtraining in terms of functions performed, and (3) improving the effectiveness and efficiency of programs.

In summary, the Kentucky Allied Health System is based upon three major social concerns: (1) the goal of comprehensive care for the individual, (2) the educational needs of the students, and (3) better utilization of existing resources.

Several barriers make the task of developing a system for allied health a difficult one; barriers created by curricula, educational institutions, health care facilities, and laws and state government agencies. However, perhaps the most formidable problem is overcoming professional biases. The temptation to exercise territorial imperatives is understandable. However, our greatest success occurred when educators philosophically believed in career mobility. In contrast, our greatest failures occurred when educators did not hold this philosophy and carefully guarded their "territory." To a

very real extent, philosophy and territoriality retarded progress.

Perhaps the significance of KAHP is that a system has been developed considering:

What is best for the patient?

What is best for the student?

How can a system of allied health education be developed that is highly efficient and integrated?

Organization of KAHP

Six phases were designed to meet KAHP's major objective of developing and implementing a statewide system of articulated allied health education. These phases are summarized in Table 1.0.

Table 1.0.

Phases of the Kentucky Allied Health Project

Phase I	Phase II	Phase III
Literature Review Manpower/Program Data Program Directory Evaluation Design Task Force	Six Discipline Advisory Groups Evaluation and Research Technical Advisory Group Role and Function Delineations Curriculum Reviews Manpower Models	Model Curricula Potential Articulation Designs Transfer Agreements Drafts System Recommendations
Phase IV	**Phase V**	**Phase VI**
Transfer Agreement Negotiations	Final Articulation Designs Articulation System Preparation Recommendations to CHE for Action	Statewide System Project Evaluation Articulation System Monitoring

To develop a model for statewide planning in allied helath education, six disciplinary clusters were chosen. These clusters include: (1) clinical laboratory sciences, (2) dental auxiliaries, (3) nutrition/dietetics, (4) radiological sciences, (5) rehabilitation therapies, and (6) respiratory therapy. All levels of programs within each discipline cluster which existed in Kentucky were included in the system.

Phase I: Planning

KAHP's planning was accomplished by several individuals and groups working in concert providing a rich interplay of ideas and abilities. In the planning phase, the staff began a literature review to determine if similar efforts had been made, their strengths and weaknesses, and their relevance to KAHP. In addition, the staff began to synthesize relevant manpower and educational program data. The merging of allied health manpower data and educational program data was viewed as essential for statewide planning. While the Council collected information regarding public higher education, a complete directory needed to include private education, vocational education, hospital-based programs, and proprietary programs. Consequently, the first planning task was to complete a statewide inventory of allied health education programs. This inventory provided the basis for activating the discipline advisory groups for Phase II.

The establishment of an overall project evaluation design was also completed in Phase I. The planning and evaluation procedure known as Program Evaluation and Review Technique (PERT) was selected to provide continuous program evaluation of progress toward the achievement of predetermined objectives.[3]

A final activity in Phase I was the activation of the Allied Health Task

Force in May, 1979. The fifteen (15) member Task Force was composed of representatives from the public colleges and universities, independent colleges and universities, vocational schools, practicing clinicians, and hospital administrators. The primary objectives for the Task Force were to provide general coordination for the project and help secure support for the project from essential publics.

Phase II: Developing and Comparing Curricula

The first step for Phase II was to activate the six discipline advisory groups in September, 1979. The membership for these six advisory groups was recommended by the Allied Health Task Force. Each group was composed of approximately 15 members (a total of 90 individuals). These individuals were chosen to represent public and independent colleges and universities, vocational schools, proprietary schools, hospital-based programs, practicing clinicians, and professional organizations. (See Figure 1.0.) The central concept used in selecting these advisory group members was that those individuals responsible for implementing project recommendations should assume key leadership positions in developing the recommendations. It was also the project staff's basic belief that there should be shared responsibility between educational institutions and the statewide coordinating board for planning a system of allied health education.

In addition to the activation of six discipline advisory groups, the project was also assisted by an Evaluation and Research Technical Advisory Group. The primary objectives of this group were to (1) develop the methods

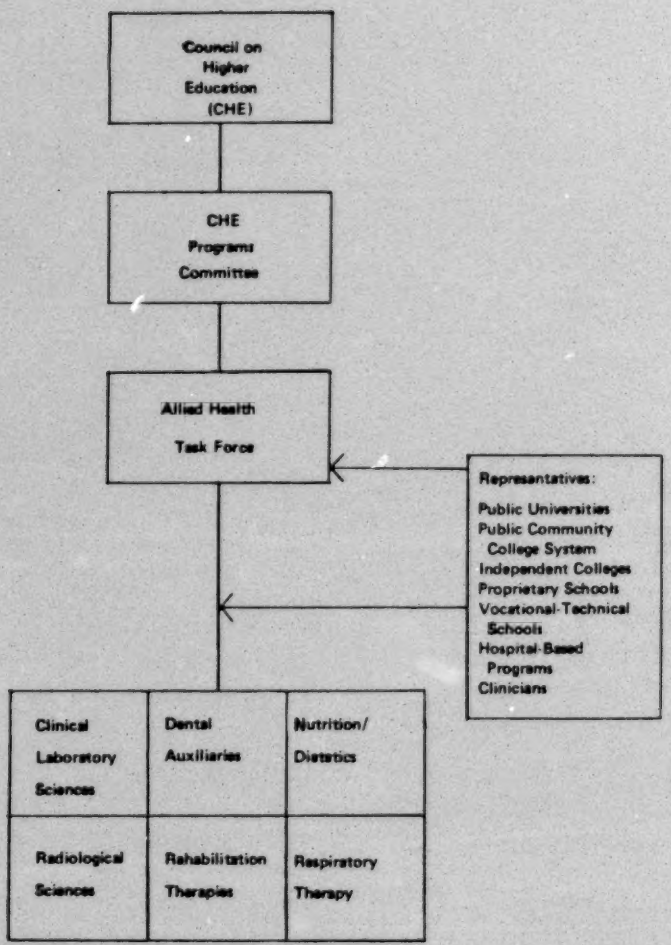

Figure 1.0. Organizational Structure of the Kentucky Allied Health Project.

and instruments for the evaluation and implementation phase of the project, (2) review a competencies research model for use by two discipline advisory groups, (3) develop a manpower projection model, (4) develop a graduate follow-up model, (5) develop a program cost assessment model, (6) develop a practitioner profile component, and (7) guide data collection and analysis.

A major activity in Phase II was the delineation of roles and functions for each level of practice within each allied health profession and the identification of competencies by level with the goal of developing curricula. This task was seen as an essential prerequisite to the design of articulation models. Each discipline advisory group approached the delineation of roles and functions differently depending on the success of their respective professional associations.

The Respiratory Therapy and Nutrition/Dietetics groups chose to use the Health Services Mobility Study (HSMS) Method of Task Analysis and Curriculum Design [4] since neither group had an acceptable and comprehensive delineation of their practices. The Clinical Laboratory Sciences group validated competencies that had been developed by their professional society. The Dental Auxiliaries group chose to utilize the roles of dental auxiliaries as specified by the Kentucky Dental Practice Act. While they realized that roles may vary by state, they chose to develop an articulation model that could work within Kentucky.

The Radiological Sciences group was represented by several similar but yet unique professions (i.e., radiography, radiation therapy, nuclear medicine, and radiation health). This group approached the delineation of roles and functions on separate but parallel paths. Each discipline in the cluster used existing resources to finalize their curricula.

While each discipline advisory group was developing a curricula that contained the information needed for safe, competent professional practice, they also gathered program-specific information such as course outlines, clock hours, percentage of lecture, lab/and/or clinical components per course, minimal acceptable grades and the pre-professional and professional components of each curriculum. The data provided the fundamental information to begin planning the early phases of transfer negotiations.

Another major activity in Phase II was the development of a resources/requirements model for each discipline for the purpose of manpower projections. The manpower data is essential information when considering the establishment, expansion, continuation, or termination of allied health programs. Three manpower models will be applied to the five allied health disciplines studied in KAHP. The models are: (1) manpower-population ratio, (2) trend analysis based on time series, and (3) health needs. Based on the manpower models KAHP completed for physical therapy [5] and respiratory therapy, [6] data are being collected to complete the clinical laboratory sciences and radiological sciences manpower models. While the limitations of making manpower projections are recognized, the information added another dimension to statewide planning efforts.

Phase III: Articulation Review

Joint meetings between the Discipline Advisory Groups and the Allied Health Task Force were held in the early summer of 1981. Together the groups (1) reviewed developed curricula, (2) reviewed the articulation designs within each discipline, (3) discussed recommendations for implementing and finalizing draft articulation agreements, and (4) discussed recommendations for implementing, monitoring, and evaluating the system.

These joint meetings provided an opportunity for the groups to share

not only their products such as curricula and draft transfer agreements, but also to discuss broader and less measurable outcomes of the process.

For example, the Task Force representative from vocational education shared the following:

> When the vocational education administrators asked the vocational faculty to participate on this project they agreed, but with little enthusiasm. However, their efforts resulted in the development of mutual respect between vocational education faculty and higher education faculty in the state. In addition, it enhanced communication within vocational educational programs. As a result of this communication, curricula were revised and strengthened. Furthermore, the vocational education faculty feel kinder toward higher education than they have in the past. Previously, they had felt like second class citizens in higher education. They emerged feeling that they were partners or co-equals. Consequently, they felt good about themselves and their programs. We have better vocational education programs because of their efforts.

Phase IV: Developing and Negotiating Transfer Agreements

After the joint meeting(s) of the Discipline Advisory Groups and the Task Force, mini-meetings were planned with selected Task Force members and faculty to help plan for the implementation of some of the transfer agreements.

Competency-based education was used as the theoretical framework for developing and negotiating transfer agreements. Types of agreements included the block credit transfer agreement and the course specific transfer agreement. Agreements were negotiated between educational systems and between specific programs/institutions.[7]

Phase V: Preparing the Articulation System

The primary activities in this phase included (1) final preparation of discipline specific articulation designs and (2) the preparation of a comprehensive statewide articulation system. Throughout the project the Task

Force had a major responsibility in the formulation of recommendations for a statewide system. These recommendations will go to the Council's Programs Committee and then to the Council on Higher Education for action.

Phase VI: Evaluation and Revision

Two primary evaluation components were planned: (1) evaluation of the project's ability to meet its stated objectives and (2) recommended procedures for evaluating the ability of the implemented system to facilitate the entry into and exit from an allied health educational program by capitalizing on student's previous relevant education and experience (i.e., ongoing monitoring of the success of the transfer agreements.)

KAHP's Approach to Leadership.

This section is included to share with others the philosophy upon which the group meetings were planned. In addition it will explain the evoluntary developments in terms of group process. Particular emphasis will be placed on the importance of group centered leadership and leadership as a shared function. It is hoped that by sharing these intimate relationships others will be encouraged to participate in similar endeavors.

Traditional views of leadership: (1) focus on the group's task; (2) the leader directs and controls; (3) the feelings and emotions of group members are not recognized; (4) the leader assumes full responsibility for decisions; and (5) the task becomes more important than individual needs.

These traditional views of leadership were abandoned. KAHP staff viewed leadership as "Group Centered Leadership." While fully recognizing the importance of the task of developing a statewide system for allied health education, we also recognized that member interactions and the emotional

reactions of individuals would have a profound effect on the successful completion of our task.

Consequently we viewed leadership as service. Such service included 1) helping the group develop a trusting climate, 2) encouraging members to freely express their feelings and 3) assisting members in accomplishing their task.

Leadership was not something that just the designated project staff members did. Leadership was shared with all members of the group. By recognizing that leadership was a group responsibility, it was also recognized that success or failure would be equally shared by all group members. This concept of shared group leadership was important because it recognized that no one person could possibly be simultaneously aware of all the group-maintenance tasks, group-building tasks, and individual problems existing at any given moment within the group. Such awareness must be shared by all members of the group.

In summary, our belief in group centered leadership was based on the assumptions that: (1) the meetings were owned by the members; the KAHP staff was a helper to the group; however, the group was responsible for all major decisions; (2) members not only shared ownership, but responsiblity for completing tasks; (3) feelings, emotions, conflict were recognized as legitimate; and (4) the needs and feelings of all members were viewed as important.

With this as our philosophical framework, we observed each discipline advisory group work through three stages of group development.[8] Stage one considers orientation, hesitant participation, and search for meaning. Our orientation meeting held on September 6, 1979 provided the setting for stage one "goblet issues". During this stage group members size each

other up through discussion of nonemotionally laden topics. The term comes from cocktail party type communication where each guest sizes up the others by looking through a cocktail "goblet".

At this meeting Dr. Joy Kirchner, who had written the project grant, described the historical foundation for the project. Project objectives were described along with the roles of the discipline advisory groups and the project staff. Also at this meeting a group process activity called "Self Portrait" was completed. The self-portrait activity was planned to help promote positive relationships among and between discipline advisory group members and project staff. The advisory group members and project staff were asked to draw a story of their lives on a large piece of paper and share this story with the other members of the groups. While on the surface this appears to be a relatively unsophisticated procedure, it provided a successful way to meet one another fairly quickly. Hopefully, it assisted in the development of an accepting environment within which the groups could work during the coming year.

In stage two, issues regarding dominance, control, and power emerge. Hostility to the "leader" may also emerge as the group members realize that the "leader" is not perfect. We found that some meetings were not as effective as others; some advisory groups willingly shared all their available resources, (i.e., curricula, admissions policies and student success/failure rates) while other groups found it difficult to share. Democracy takes time; the price of group decision making and consensus is time, trust, and openness. Futhermore, tradition seemed to inhibit meeting effectiveness. For example, the older more established professions such as clinical laboratory sciences and the rehabilitation therapies had much more difficulty planning sequences of transfer, especially for the professional courses within the curricula. In

contrast, respiratory therapy found the task less cumbersome. However, at no time during stage two did we feel overt hostility.

In stage three group members began to have concerns about intimacy and closeness. As the groups began to be able to more freely address their positive and negative feelings, they became more cohesive and mature. This maturity was characterized by the following:

(1) Serious involvement in activities

As the members began to feel a sense of ownership and involvement in their tasks, they assumed greater responsibility for such activites as report writing and team building.

(2) Trust and caring

The trust and caring that emerged in some groups allowed the members to express concerns, feelings, fears, and ideas.

(3) Accepting new members

It was recognized that group membership would always be in the process of change, adding new members and losing old ones. However, new members were accepted and seen as a potential resource.

The previous description basically describes the work of the five discipl advisory groups that were viewed as somewhat or very successful. However, not all our discipline advisory groups were successful; and we would like to briefly try to present a rationale for why one group failed. A successful group interacts over time to accomplish one or more goals that are valued by each of the participating individuals.[9] The physical therapy advisory group's philosophy statement stated that there was currently no organized effort on the part of the physical therapy profession to facilitate the upward mobility of the physical therapist's assistant within the profession. Mirroring this philosophy, physical therapy's support of transfer for the assistant was

somewhat less than whole hearted.*

As a result the project goals were in conflict with the goals of the physical therapy advisory group members. Because upward mobility for the assistant was not "valued" by this group, the project's objectives for this group were not achieved. This was further reinforced to us by such statements as - "I don't feel its appropriate for this group to do more at this time." "Prove there is a need for articulation by a statistical study." "We met our objectives a long time ago, when we stated articulation was not appropriate at this time" " I would prefer if the project were terminated."

To summarize, no matter how competent the group leader or how many resources are available in terms of time and money, if the group does not highly value the goals, the group will fail.

To conclude we would like to offer a number of suggestions that may be useful to newly formed groups that have as their goal the development of articulation agreements:

(1) Develop an awareness for the interdependent behaviors that must be performed by group members.

Task behaviors are those behaviors that are related to achieving the groups goals such as giving suggestions or directions and seeking information. Maintenance functions are those behaviors related to maintaining harmonious relations among members such as helping, rewarding, relieving tension by joking, and showing satisfaction. Both task behaviors and maintenance behaviors are equally important.

*While the Rehabilitation Therapy DAG did not develop an articulation model that transferred professional course credit, an articulation agreement between the Physical Therapy Program at the University of Louisville and the Physical Therapist Assistant program at Jefferson Community College was developed after the Rehabilitation Therapy DAG decided to discontinue meeting.

(2) View leadership as a shared group function.

By viewing leadership as a shared group function, all members are encouraged to contribute and the sharing of leadership ensures that all the resources of the group will be used productively.

(3) Willingly accept new members.

While a high turnover of group membership may indicate that something is seriously wrong within the group, some turnover is natural. Welcome each new group member as a valuable resource.

(4) Allow "hidden agendas" to surface in open discussion.

Hidden agendas occur because an individual believes that the item may be judged as wrong or inappropriate, rather than as a reflection of a legitimate need or purpose. Remember, group members may be trying to simultaneously achieve individual and group goals. Often the degree to which both goals can be achieved determine the success of the group. Recognize that members may bring a hidden agenda to the group--one they hesitate to share openly because it is so self-oriented. Allow hidden agendas to surface in open discussion so that personal needs may be handled without disturbing the group.

(5) View conflict as natural.

Most substantive issues will involve some conflict. View this conflict as natural and indeed inevitable. Conflict worked through constructively can provide an important success experience for the group. Furthermore, it will reduce the fear of conflict and further strengthen the group.

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2 CLINICAL LABORATORY SCIENCES

For the purposes of the Kentucky Allied Health Project clinical laboratory sciences encompassed the one year, certificate medical laboratory technician program, two year associate degree medical laboratory technician programs and four year medical technologist programs within the Commonwealth.

The overall goal of the Discipline Advisory Group (DAG) was to negotiate transfer agreements between medical laboratory technician programs and medical technology programs. Representatives from each of the public college/university programs existing in Kentucky participated on the DAG. Additionally, representatives of private colleges, proprietary schools, hospital based programs and the Kentucky State Society for Medical Technology also actively participated.

To provide an overview the following discussion presents 1) definitions, 2) historical development, 3) education of a professional, 4) accreditation, 5) regulatory practice and 6) educational challenges of articulation.

Clinical Laboratory Sciences Education

Definition of Profession:

Clinical Laboratory Professionals, as members of the health care team, are responsible for:

(1) Assuring reliable test results which contribute to the prevention, diagnosis, prognosis and treatment of physiological and pathological concerns. This includes:

Producing accurate test results;

Assessing and improving existing laboratory methodologies;

Integrating, correlating and interpreting test data.

(2) Designing and implementing cost-effective administrative and quality control procedures for laboratories, services and personnel.

(3) Designing, implementing and evaluating processes for education and continued education of laboratory personnel.

(4) Developing and monitoring a Quality Assurance System to include:

(a) Quality Control of Services
(b) Competence Assurance of Personnel

(5) Promoting an awareness and understanding of the profession to laboratory personnel, related professions and to the consumer/public.

Historical Development

In 1896 a laboratory for research on body fluids was established at Johns Hopkins University. This laboratory was operated by a physician and is considered the forerunner of today's clinical laboratory. Physicians performed all clinical laboratory testing procedures until the time of the First World War when the need for persons skilled in laboratory procedures was greatly increased and out of necessity, physicians taught their skills to persons of lesser educational status. In 1922 the first formal academic program in medical technology emerged at the University of Minnesota. By 1936 medical technology programs were being officially accredited.

In response to the Higher Education Act of 1963 and the Allied Health Training Act of 1966, the one year certificate programs for Certified Medical Laboratory Technicians, MLT(C) were established, the first programs being accredited in 1967. The spread of the community college concept added to

the impetus of federal funding and by 1971 the third level of the profession, the associate degree MLT(AD) programs were being accredited. Preliminary studies in the mid-seventies indicated that, in practice, there are two, not three levels of personnel in the clinical laboratory. In 1980 it was decided that certification offered by the American Society for Clinical Pathologists for the one year person would no longer be available after August 1982. However those persons completing the one year program may still become certified through the National Certifying Agency for Medical Laboratory Personnel, sitting for the same exam that graduates of two year MLT programs write.

Education of A Professional

The first educational level in the clinical laboratory sciences profession is that of the Clinical or Medical Laboratory Technician (CLT/MLT). This level of practice may be attained by completion of a structured one or two year program. These will be looked at separately.

The person who graduates from a one year approved program offered in a hospital, junior or community college or in a vocational school and who has met certification requirements is designated CLT or MLT (C), dependent upon the certification examination written by the individual. The curriculum consists of introductory courses in psychology, communications, professional relations and organizations, medical law and ethics, scientific-instrumentation, anatomy and physiology, medical terminology, laboratory mathematics, hematology, serology, blood banking, chemistry, microbiology, clinical microscopy, principles of quality control and record keeping.

Graduates of two year associate degree programs offered by junior and community colleges and who have met certification requirements are designated CLT or MLT (AD), dependent upon the type of certification examination. The

two year curriculum should include communication skills; interpersonal relationships and social responsibility such as psychology and/or sociology; basic mathematics including dilutions and basic statistics; basic sciences such as elementary anatomy and physiology, microbiology and chemistry including qualitative, quantitative and organic; clinical courses to include hematology, serology, bloodbanking, chemistry, microbiology, principles of quality control and record keeping.

The third level in the clinical laboratory sciences profession is that of the Clinical Laboratory Scientist (CLS) or Medical Technologist (MT), dependent upon certification. These individuals have completed a baccalaureate level program by one of three routes:

(1) two years of preprofessional courses and two years of professional courses (2 + 2);

(2) three years of general education pre-professional courses and a fourth year in an affiliated hospital based program (3 + 1);

(3) completion of a baccalaureate degree followed by one year in a hospital based program (4 + 1).

The curriculum, in addition to courses in chemistry, biological sciences, communications and other general education courses, also covers courses in serology, microbiology, hematology, blood banking, clinical chemistry, principles and practices of quality control, laboratory management, and principles of instruction. The clinical or professional courses, although covering the same areas as the first two levels of the profession, are covered in a greater depth in the four year program.

It is currently possible for a person to by-pass the structured educational programs and still obtain recognized professional certification through alternative routes.

Accreditation

The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) is a review committee that cooperates with the Committee on Allied Health Education and Accreditation (CAHEA). CAHEA is recognized by the Council on Postsecondary Accreditation (COPA) as the accrediting agency for educational programs in the Clinical Laboratory Sciences and is also recgnized by the U.S. Department of Education as a coordinating agency for the accreditation of programs in the Clinical Laboratory Sciences. Program accreditation is granted for a period of five years upon completion of a satisfactory self-study and site visit. Renewal is contingent upon successive self-studies and site visits. Program requirements are spelled out in the Essentials for each educational level and program. Programs must be housed in regionally accredited educational institutions or in hospitals accredited by the Joint Commission on Accreditation of Hospitals. The Essentials address the areas of program evaluation, fair practices and the maintenance of accreditation.

Regulatory Practice

Licensure of clinical laboratory personnel is relatively uncommon. In 1976, six states had provision for the licensing of laboratory directors, and five states for medical technologists. By March, 1979 twelve states and Puerto Rico had enabling legislation for the licensure of technologists and two states had legislation for the licensure of laboratory technicians. However, licenses may not be presently issued in all of these jurisdictions and there may be a considerable lapse of time between the passage of authorizing legislation and its implementation. Also, some states do not require a license in certain work settings.

States which have legislation enabling the licensure of medical technologists

are: Alabama, California, Flordia, Hawaii, Illinois, New Jersey, Nevada, Kentucky, New York, Pennsylvania, South Carolina, Tennessee, Puerto Rico. Florida and Tennessee also provide for licensure of medical technicians. In Kentucky, Chapter 333 of the Kentucky Revised Statutes addresses the clinical laboratory; it is the laboratory that is licensed, based on the personnel meeting licensure requirements.

The U.S. Department of Health & Human Resources published personnel requirements for the clinical laboratory in the Federal Register in 1979. However, there was such an overwhelming negative response from practitioners that these requirements were never implemented and the issue has yet to be resolved.

Currently, the only "regulation" is that practiced by some pathologists who require that all persons hired in their laboratory be certified by the American Society for Clinical Pathologists Board of Registry. Even this is being contested since there are other agencies administering certification examinations for clinical laboratorians: the National Certification Agency (NCA), American Medical Technologist (AMT), Registered Medical Technologist (RMT), and International Society for Clinical Laboratory Technicians (ISCLT). The majority of the graduates of the CAHEA approved programs sit for the ASCP examination and/or the NCA examination.

Educational Challenges of Articulation

In the development of a statewide plan for articulation, there were several problem areas that surfaced at various times throughout the project. One major barrier to the development of an articulation model was the fear of loss of academic freedom voiced by several program directors/coordinators. These people were fearful that a model for articulation would lead to

standardization of program curricula by the Council on Higher Education. Because academic freedom was an issue, many CLS DAG members found it hard to go beyond the data collection stage of the project. The statement was repeatedly made, "We don't know what is really going to be done with this report." Concomitantly, CLS DAG members refused to be specific with recommendations; no recommendations would be made regarding individual programs/curricula nor were the DAG members willing to make specific statements regarding implementation of the recommendations that were made in the CLS DAG Report, June 1981.

Another barrier to articulation was the resistance of faculty to change. Some DAG members expressed personal support of articulation at their institution but noted that some of their faculty members were opposed to the concept and were blocking/slowing the process at those institutions. Additionally, one DAG member made the statement that their presence on the DAG did not indicate their support of articulation. (DAG members were nominated by their Deans for membership on the Committee).

Hospital based programs, while vocally supporting the concept of articulation, have been reluctant to participate. This reluctance is based on the lack of faculty actually available to evaluate curricula for overlapping areas, evaluate experiential learning, develop learning modules, individualize programs, and/or restructure curricular format.

The question was raised on several occassions as to the efficacy of such an intense effort on such a large scale for such a small number of students. However, these statements were based on current articulation. No study had been made at that time on a statewide basis to ascertain actual interest on the part of students and graduates. Since then, both current students and graduates of MLT programs in the state have been surveyed. The results of

these surveys have shown that 80% of each group is interested in articulation. The primary barriers identified by graduates were location of medical technology programs and finances. (The complete report is available from the Council on Higher Education.) Further, the number of students apt to participate upon establishment of transfer agreements, implementation of the articulation model and publication of articulation possibilities could be a number varying greatly from the actual number to date.

3 DISCIPLINE ADVISORY GROUP ACTIVITIES

The primary charge to the Clinical Laboratory Sciences Discipline Advisory Group was to develop a statewide plan for Clinical Laboratory Science education which would result in an articulated statewide system permitting entry and exit of prepared personnel at a variety of levels and improve interinstitutional efforts to share educational resources.

The purpose of this chapter is to share the three phases of the Clinical Laboratory Sciences Discipline Advisory Group's activities. A description of each phase follows.

Phase One: Orientation Activities. Orientation activities included a review of the charge to the Discipline Advisory Group, the sharing of each program's phliosophy and goals and the use of the Program Evaluation and Review Technique (PERT) for the planning of the DAG's activities. See Appendix A for a description of how PERT was used to plan and evaluate the DAG's activities.

Phase Two: Model Curriculum Activities. Development of a model curriculum began with the delineation of Roles and Functions for the three levels of CLS practitioner. The six areas covered in the roles and functions were:

(1) Performing Analyses

a. routine
b. complex
c. design

(2) Problem Solving

(3) Systems Control and Organization

a. recordkeeping & reporting
b. preparing budgets & schedules
c. computer data processing

(4) Supervision & Management

a. self
b. others
c. management

(5) Education

a. self
b. others

(6) Interpersonal Relationships

a. patient
b. subordinates
c. peers
d. superiors

Utilizing Bloom's taxonomy, expected levels of achievement were assigned to each educational level of practitioner in the cognitive, psychomotor and affective areas.

These Roles and Functions were then used as a guide in reviewing the American Society for Medical Technology developed competency statements and were the basis for the few changes made in these statements. Objectives were then written, designed to be exit level objectives. Clinical Laboratory Sciences Discipline Advisory Group members, working in Medical Laboratory Technician and Medical Technology subcommittees drafted objectives in the areas of hematology, immunohematology, microbiology, immunology and clinical chemistry/urinalysis.

In order to validate these objectives, they were evaluated by 63 practitioners in 28 hospitals and clinics across the State ranging in size from 45 to 500 beds. Additionaly, 24 Clinical Laboratory Sciences educators at 13 educational institutions across the Commonwealth also evaluated the objectives. After extensive critique, the objectives were again reviewed by the respective subcommittees, a second draft sent out for evaluation and then final copies of the objectives for each area were developed based on the two sets of evaluations. Each area (i.e. hematology) was then broken down into two levels, basic and advanced, dependent upon whether the objective had been designated MLT or MT.

A model articulated curriculum, based on the Essentials and these objectives may then be developed (Table 2). The Medical Technologist would have had courses for all three levels, the MLT (AD) for the two levels, including MLT(C) below it. In this manner, courses will have been built on each other much the same as building blocks, creating a final product of an articulated curriculum.

TABLE 2. MODEL ARTICULATED CURRICULUM

EDUCATIONAL LEVEL	COURSE REQUIREMENTS			
	BIOLOGY	CHEMISTRY	MATH	PROFESSIONAL COURSES
MT	ADDITIONAL BIOLOGY COURSES (TO TOTAL MINIMUM OF 16 SEM. HRS.) IMMUNOLOGY (MAY BE COMBINED WITH ANOTHER COURSE) GENERAL BIOLOGY WITH LAB	ORGANIC OR BIOCHEMISTRY WITH LAB (TOTAL SEM. HRS. = MINIMUM OF 16) QUANTITATIVE CHEMISTRY WITH LAB	COLLEGE LEVEL MATH	ADVANCED LEVEL BASED ON DAG DEVELOPED OBJECTIVES
MLT(AD)	GENERAL MICROBIOLOGY WITH LAB	GENERAL COLLEGE CHEMISTRY WITH LAB (2nd COURSE)		BASIC LEVEL BASED ON DAG DEVELOPED OBJECTIVES
MTL(C)	ANATOMY & PHYSIOLOGY WITH LAB	GENERAL COLLEGE CHEMISTRY WITH LAB	COLLEGE LEVEL MATH	BASIC LEVEL BASED ON DAG DEVELOPED

Phase Three: Negotiating Transfer Agreements. Each step in the process is described as follows:

Identify Programs. All Clinical Laboratory Sciences programs from all levels of higher education and all types of institutions (i.e., vocational, private, public and proprietary) were identified. A comprehensive program inventory of all Clinical Laboratory Sciences programs was compiled. No complete directory of programs existed in the state; even though the Council collected information for public higher education, a complete directory was needed to include private education, vocational education, hospital-based programs and proprietary programs.

Identify Most Feasible Agreements. The programs within the nearest goegraphical locales were identified as the programs between which students would most likely transfer. The development of the following transfer agreements was suggested by the Discipline Advisory Group.

From	To
Eastern Kentucky University MLT (AD)	University of Kentucky MT (BS)
Eastern Kentucky University MLT (AD)	Morehead State University MT (BS)
Eastern Kentucky University MLT (AD)	Western Kentucky University MT (BS)
Eastern Kentucky University MLT (AD)	Northern Kentucky University MT (BS)
Eastern Kentucky University MLT (AD)	University of Louisville MT (BS)
Eastern Kentucky University MLT (AD)	Thomas More College MT (BS)
University of Kentucky Community College System MLT (AD)	University of Kentucky MT (BS)

From	To
University of Kentucky Community College System MLT (AD)	Eastern Kentucky University MT (BS)
University of Kentucky Community College System MLT (AD)	Morehead State University MT (BS)
University of Kentucky Community College System MLT (AD)	Western Kentucky University MT (BS)
University of Kentucky Community College System MLT (AD)	University of Louisville MT (BS)
University of Kentucky Community College System MLT (AD)	Kentucky State University MT (BS)
University of Kentucky Community College System MLT (AD)	Thomas More College MT (BS)
Watterson College MLT (AD)	Eastern Kentucky University MT (BS)
Watterson College MLT (AD)	Morehead State University MT (BS)
Watterson College MLT (AD)	Western Kentucky University MT (BS)
Watterson College MLT (AD)	Northern Kentucky University MT (BS)
Watterson College MLT (AD)	University of Louisville MT (BS)
Watterson College MLT (AD)	Kentucky State University MT (BS)
Watterson College MLT (AD)	Thomas More College MT (BS)
Murray State University MLT (AD)	Western Kentucky University MT (BS)
Murray State University MLT (AD)	University of Louisville MT (BS)

From	To
Madisonville Area Vocational Technical School MLT (C)	Western Kentucky University MT (BS)
Madisonville Area Vocational Technical School MLT (C)	University of Louisville MT (BS)

Development and Negotiation of Agreements. Based on the listing of possible agreements and the actual enrollment in programs, series of meetings between MLT program directors and medical technology program directors were scheduled. Prior to each meeting (usually at least two months) the program directors were supplied with extensive curricular material from each program. This material included objectives, course outlines, sample examinations, clinical practicum guidelines, evaluations and schedules. Faculty at the receiving institution's medical technology program reviewed the materials for each corresponding course in the medical technology curriculum to determine areas of overlap in the two curricula in order to best determine how credit or advanced placement for each sending institution graduate could be granted.

Curricular materials from the UK Community College System, Watterson College, Murray State University and Madisonville Area Vocational Technical School were made available to medical technology faculty at St. Elizabeth Medical Center, St. Joseph Hospital, St. Anthony Hospital, Lourdes Hospital, Morehead State Univeristy, University of Louisville, University of Kentucky, and Western Kentucky University faculty.

Once the medical technology faculty at the sending institutions indicated they had completed their evaluation of the Medical Laboratory Technician curricula provided them, joint meetings were scheduled. The format of these meetings was that of an oral description of each Medical Laboratory Technician program by the Medical Laboratory Technician program coordinator/representative followed by

general and specific questions from the Medical Technology Program Director and/or faculty. This process proved to be quite effective in giving a much better indication of the processes, programmatic content and depth at each of the individual Medical Laboratory Technician programs.

After these joint meetings, medical technology program directors met with their faculty to discuss the direction to be taken. Was articulation feasible considering program format and scheduling? If it was feasible, to what extent? How should the articulation process be implemented at their institution?

Based on the answers to these questions, individual articulation agreements were drawn up by Council staff and shared with representatives from both institutions. Changes were made as indicated by the institutions involved and again shared with each institution. Once both institutions were satisfied with the transfer agreement content, the signing process was instituted through the mail.

With the successful signing of the transfer agreement students had the door to career mobility opened wider for them. In addition all programs involved were enriched and their potential applicant pools were increased.

4 RESULTS

Transfer Agreements

Several transfer agreements were actively pursued to secure transfer of credit for students desiring career mobility. The institutions and educational systems involved in the agreements were those where articulation was most feasible based on three criteria: (1) geographic proximity of programs potentially involved in the agreement, (2) size of medical technology program, and (3) active interest shown by program representatives to work out conditions of agreement for transfer of credit. Agreements were drawn up between both specific programs and specific programs and educational systems (i.e. University of Kentucky Community College System).

The actual agreements drawn up are as follows:

From	To
Madisonville Area Vocational Technical School Medical Laboratory Technician Program (C)	University of Kentucky Medical Technology Program (BS)
Madisonville Area Vocational Technical School Medical Laboratory Technician Program (C)	University of Louisville Medical Technology Program (BS)

From	To
Madisonville Area Vocational Technical School Medical Laboratory Technician Program (C)	Madisonville Community College Associate in Science Program (AD)
Murray State University Medical Laboratory Technician Program (AD)	Eastern Kentucky University and St. Joseph Hospital Medical Technology Programs (BS)
Murray State University Medical Laboratory Technician Program (AD)	University of Kentucky Medical Technology Program (BS)
Murray State University Medical Laboratory Technician Program (AD)	University of Louisville Medical Technology Program (BS)
University of Kentucky Community College System Medical Laboratory Technician Program (AD)	Eastern Kentucky University and St. Joseph Hospital Medical Technology Programs (BS)
University of Kentucky Community College System Medical Laboratory Technician Program (AD)	Morehead State University and St. Joseph Hospital Medical Technology Programs (BS)
University of Kentucky Community College System Medical Laboratory Technician Program (AD)	University of Kentucky Medical Technology Program (BS)
University of Kentucky Community College System Medical Laboratory Technician Program (AD)	University of Louisville Medical Technology Program (BS)
University of Kentucky Community College System Medical Laboratory Technician Program (AD)	Western Kentucky University and St. Joseph Hospital Medical Technology Programs (BS)
Watterson College Medical Laboratory Technician Program (AD)	Eastern Kentucky University and St. Joseph Hospital Medical Technology Programs (BS)
Watterson College Medical Laboratory Technician Program (AD)	University of Kentucky Medical Technology Program (BS)

From	To
Watterson College Medical Laboratory Technician Program (AD)	University of Louisville Medical Technology Program (BS)
Eastern Kentucky University Medical Laboratory Technician (AD)	University of Kentucky Medical Technology Program (BS)
Midway College Medical Laboratory Technician (AD)	University of Kentucky Medical Technology Program (BS)

A summary of the hours of advanced placement credit proposed to be awarded or being awarded as of Summer 1982 may be found in Table 3.

Additionally, an inhouse articulated curriculum has been developed and approved for the Murray State University MT and MLT programs. Madisonville Area Vocational and Technical School has developed an agreement with Madisonville Community College which will allow graduates of the MAVTS MLT(C) program to be granted two semesters of college credit for their course work at the vocational school if they wish to earn the A.D. degree at the Community College.

Current MLT Student and MLT Graduate Interest Surveys

During the first two years of KAHP, several CLS DAG members questioned the efficacy of spending so much time and effort on a project that would benefit what they perceived to be a small number of persons. This feeling was based on the fact that only a small number of MLTs had actually gone on to complete four year programs in medical technology. Was this small number due to a lack of interest, lack of a definite career ladder or some other reason? What amount of interest in articulation actually existed?

In the Spring of 1982 an articulation interest survey was conducted. Both current MLT students and graduates of MLT programs were included in

TABLE 3. TOTAL CREDIT TRANSFERRING FOR MLT COURSES AT STATE UNIVERSITIES

	UKCCS	EKU	MDMY	MATUS	MUSU	WC	Row Means
EKU*	8 hours transfer plus 8 hours St. Joseph				8 hours transfer plus 8 hours St. Jos.	8 hours transfer plus 8 hours St. Jos.	16 hours
MoSU	10 hours transfer plus 8 hours St. Joseph						18 hours
MuSU					in house articu-lation complete		——
U of K	17 hours	17 hours	17 hours	11 hours	17 hours	11 hours	15 hours
U of L	17 hours transfer 4 hours test out			10 hours transfer 11 hours test out	13 hours transfer 8 hours test out	6 hours transfer 15 hours test out	11.5 hours
WKU	10 hours transfer 8 hours at St. Jos.						18 hours
Column Means	17.2 hours	17.0 hours	17.0 hours	10.5 hours	15.3 hours	12.5 hours	——

*This refers to admission to the 3+1 Program.

(SUMMER 1982)

the survey. Of both groups, 80% of the respondents indicated that they would be interested in articulation if a career ladder existed. The most often cited ultimate career goal was performing laboratory tests at the bench. When asked why they were not currently enrolled in a medical technology program, the two most frequently given reasons were location of the programs and financial reasons. A copy of the complete study may be obtained from the Council on Higher Education.

Manpower Study

With the support of the Kentucky Hospital Association and the Department for Human Resources, the collection of Clinical Laboratory Science manpower data was made possible. Data collected included 1) number of full-time equivalent employees and budgeted vacancies by type of certification, 2) related variables such as education, years experience, and educational programs attended, and 3) laboratory specific data including the number and variety of testing procedures performed and the amount of automation. This information, coupled with demographic and economic data will be used to develop an econometric model for forecasting clinical laboratory manpower demand. The complete manpower report is available from the Council on Higher Education.

Development of a Clinical Laboratory Sciences Brochure

Utilizing data compiled for the CLS Program Inventory, a brochure describing the various clinical laboratory sciences programs available in the state was developed. The brochure includes definitions and academic requirements, location of programs, tuition, application deadlines, and programs known to be actively involved in articulation. These brochures have been distributed to all CLS program coordinators in the state for use in recruitment.

Recommendations

The recommendations that follow were made by the CLS Discipline Advisory Group in 1981. During the 1981-82 year, mini meetings were held with only one meeting of the entire DAG in May to share the accomplishments of each program. Thus, no recommendations were made by the entire group in 1982.

1. ENCOURAGE CONTINUATION OF THE ARTICULATION PROCESS ON A STATEWIDE LEVEL.
2. MAINTAIN A CLEARING-HOUSE FOR THE COORDINATION OF CLS PROGRAM ARTICULATION ACTIVITIES AND THE DISSEMINATION OF INFORMATION RELATIVE TO THESE ACTIVITIES.
3. ENCOURAGE DEVELOPMENT OF TRANSFER MECHANISMS ACCORDING TO MODELS PROPOSED IN THIS STUDY.
4. PROMOTE CURRICULUM DEVELOPMENT AND/OR REVISIONS BASED UPON THE OBJECTIVES AND COMPETENCIES IDENTIFIED IN THIS STUDY.
5. ESTABLISH A PROGRAM OF FUNDING IN THE COUNCIL ON HIGHER EDUCATION THROUGH WHICH EDUCATIONAL INSTITUTIONS OR ORGANIZATIONS MAY APPLY FOR AND OBTAIN SUPPORT FOR ARTICULATION ACTIVITIES.

Conclusions

In the past twelve months considerable progress has been made in the Clinical Laboratory Sciences toward true articulation. Replacement of the requirement of proficiency examinations with the granting of advanced placement

in the program for MLT program graduates was the greatest achievement of the 1981-1982 KAHP year in the area of Clinical Laboratory Sciences.

Based on the Articulation Interest Survey findings, it would seem that the Medical Technology Programs offering an articulated curriculum would have increased MLT enrollment if some provision were made for offering courses in the rural areas of the state. This would meet the needs of those graduates who reported that program location and finances were the primary reasons for their non attendance. Program offerings in these areas would allow the MLT to continue to work while attending school on a part-time basis.

APPENDIX A

Planning and Evaluation with PERT

Planning and Evaluation with PERT

Introduction

Planning and evaluation have been distinct challenges to persons writing proposals or implementing projects. One method for managing these challenges is the Program Evaluation and Review Technique (PERT).

PERT forced the identification of project activities that were necessary to reach the project goal and permitted evaluation of progress toward the goal. For example, when KAHP activities for the first year were planned and subjected to PERT, it was evident that failure to complete the activities in the amount of time prescribed was likely. A 68 percent probability of completing the first year activities was calculated.

Alternative solutions to the problem, as identified by PERT, were discussed by Council staff. Adjustments were made and the probability of completing the activities was elevated to 72 percent; however, the success of the project remained in doubt. Further adjustments were made and the probability of completing the first year activities increased to 95 percent.

Planning KAHP Activities

Project activities were identified and a Gantt chart was developed that depicted the activities of KAHP. Although the activities were identified and placed within time frames, the interrelationships among the activities were difficult to identify. Therefore, a "network" of activities was developed for the project. The network illustrated activities which were dependent upon other activities and activities which paralleled one another.

Three completion times, expressed in working day units, for each activity were estimated by Council staff: (a) most optimistic, (m) most likely, and (b) most pessimistic. A mean estimated time was then calculated for each of the three estimates per activity using the following formula:

$$T_E = \frac{a + 4(m)+b}{6}$$

The variance of the three mean time estimates per activity was calculated as follows:

$$V^2 = \frac{(b-a)^2}{6}$$

The critical path was the path requiring the largest amount of completion time. If sufficient amounts of time and resources were not available to complete the critical path, the success of the project was doubtful.

Several paths through the network were possible. The estimated times (T_E) for activities in each possible path were summed and a critical path (CP) was identified. The other paths were considered alternate paths.

Three methods to increase the probability of completing the activities were available:

1. Increase the time available to complete the project (TL).

2. Identify time and resources available in parallel activities that may be applied to critical path activities; thus, reducing the total time estimate for the critical path.

3. Plan to complete selected activities along the critical path in less time than estimated (i.e. reduce the estimated time).

During the project, Council staff applied the second method. The estimated time for an alternate path was subtracted from the estimated time of the critical path. The difference was "slack time" and "slack resources;" those resources were applied to another activity in the critical path; thus, the total estimated time for the critical path was reduced.

The adjustment increased the probability of completing first-year the activities 4 percent; however, the chance of success needed to be improved, if possible. The length of the critical path was further reduced by using the third method of increasing probabilities.

By planning to concentrate several Council staffs' efforts and by incorporating materials prepared throughout the initial months of the project, the estimated time was reduced.

The probability of completion was recalculated after shortening the critical path. By reallocating personnel and resources in an alternate path and by shortening the critical path estimated time, the probability of completing the first year activities, for example, was raised from 68 percent to 95 percent. Council staff were more confident that a successful project was possible. The technique was applied throughout the project.

Evaluating KAHP Activities

A process for evaluating the degree to which the specific project objectives and the project goal were reached was developed by utilizing the inherent capability of PERT, i.e. an evaluation procedure. Although the PERT evaluation procedure can be utilized at the conclusion of a project, staff decided to use a portion of the procedure periodically, as activities along the critical path were completed. Thus, continual monitoring of the project's status permitted identification of potential future trouble spots. The evaluation procedures were used for KAHP DAG, TAG, and Task Force objectives at the conclusion of year one and during the beginning of year three.

A formative interim evaluation of advisory groups' attitudes and accomplishments was requested by Dr. Elizabeth King, Associate Director for Allied Health Education and KAHP Director, in November, 1980. The results were used to help: 1) identify specific advisory groups' activities/ issues which needed attention, 2) plan the KAHP final year activities, and 3) identify activities which may continue beyond the funding cycle of KAHP.

Two evaluation designs were the foundations of all measurements. Attitudinal measurements were collected each time an advisory group met. The degrees to which advisory groups' activities were met were measured at the end of year one and during October-December, 1980 in the final year of KAHP.

Periodic evaluations of attitudes provided on-going feedback about each meeting to the KAHP staff and advisory groups. The instrument was administered at the conclusion of each meeting.

Output measures were: 1) the degree to which each advisory group's activities were accomplished, and 2) the advisory groups' attitudes. The groups' activities addressed the project's goals; attitudes were measured to assess the "climate" of the KAHP. Appendices are instruments used to collect data. The instruments were developed by the KAHP advisory groups and staff.

The schedule for attitude data collection paralleled DAG, TAG, and Task Force meeting dates (monthly). The instruments were administered by the KAHP staff at the conclusion of each meeting; each advisory group member completed an instrument. Interim activity evaluation instruments were administered in FALL, 1980 by KAHP staff at the regularly scheduled meeting or through the mail.

System Maintenance

At the conclusion of year three, staff identified activities which were necessary for the maintenance of A Statewide System for Allied Health Education. The PERT planning process was applied: (1) activities were identified, (2) a Gantt chart was constructed, (3) a network of activities was constructed, and (4) the times were estimated.

The probability of completing the activities can be calculated when the allowed completion time is determined. During system implementation, feedback from PERT evaluation procedures will provide formative evaluation data to the Council.

APPENDIX B

Clinical Laboratory Sciences

Program Inventory - 1981

CLINICAL LABORATORY SCIENCES PROGRAM INVENTORY - KENTUCKY 1981

INSTITUTIONS	CT	MLT	MT 3+1*	MT 2+2
Public Senior Institutions				
Eastern Kentucky University		X	X	X
Kentucky State University			X	
Morehead State University			X	
Murray State University		X	X	
Northern Kentucky University			X	
University of Kentucky				X
University of Louisville	X		X	
Western Kentucky University			X	
Public Community Colleges				
Henderson Community College		X		
Jefferson Community College		X		
Somerset Community College		X		
Southeast Community College		X		
Independent Colleges				
Asbury College			X	
Brescia College			X	
Campbellsville College			X	
Centre College			X	
Cumberland College			X	
Georgetown College			X	
Kentucky Wesleyan College			X	
Midway College		X		
Pikeville College			X	
Spalding College			X	
Thomas More College			X	
Vocational Education				
Madisonville Voc-Tech School		X		

(Continued on following page)

Hospital Based-MT**			
Lourdes Hospital		(X)	
Methodist Hospital of Kentucky		(X)	
Owensboro-Daviess County Hospital		(X)	
St. Anthony Hospital		(X)	
St. Elizabeth Medical Center		(X)	
St. Joseph Hospital		(X)	
Sts. Mary & Elizabeth Hospital		(X)	
Proprietary			
Louisville College of Medical & Dental Careers	X		
Watterson College	X		
TOTAL	8	17	2

* Fourth year of these MT programs are provided by hospital based programs listed in this inventory.

** Degrees conferred by colleges or universities affiliated with the hospital based programs.

APPENDIX C

Transfer Agreements

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE MURRAY STATE UNIVERSITY MEDICAL LABORATORY TECHNICIAN ASSOCIATE DEGREE PROGRAM TO THE EASTERN KENTUCKY UNIVERSITY BACCAUAREATE DEGREE PROGRAM IN MEDICAL TECHNOLOGY

Conditions of Agreement for Transfer of Credit

According to the conditions of this agreement Medical Laboratory Technician graduates or students from the Murray State University can transfer to the Medical Technology Program at Eastern Kentucky University.

(1) Upon formal documentation of completion of the Medical Laboratory Technician Associate Degree Program of Murray State University these graduates will be eligible for admission to the Medical Technology Bachelor Degree Major at Eastern Kentucky University.

(2) Successful completion of the Medical Laboratory Technician Degree Program is defined by the current standards of the Program; if requirements for graduation at either program change, the other program is to be notified and the conditions of this agreement reviewed.

(3) Graduates from the Medical Laboratory Technician program shall be subject to the same admission and academic policies as all applicants to the Eastern Kentucky University program.

(4) Murray State University graduates admitted to the Medical Technology Program at Eastern Kentucky University shall be awarded direct transfer credit and advanced placement credit as follows:

Direct Transfer Credit

Course	Title	Hours
ENG 101	Freshman Composition	3
ENG 102	Advanced Freshman Comp.	3
CHE 121-122	General College Chem I,II	6
CHE 205-206	Brief Analytical Chemistry & Lab	4
CHE 215	Basic Biochemistry	3
CHE 210	Brief Organic	3
CHE 315	Organic Lab I	1
MAT 110	Algebra and Trigometry	5
BIO 300	Introductory Micro	4
	Any courses except Medical Laboratory Technicial courses up to	8
IDC 101-102	World Civilization	6
	Total	26-46 hours

Advanced Placement Credit

Courses BIO 130, 131, 134, 135, 231, 232, 234 and 235 will transfer for credit for these Eastern Kentucky University course offerings:

Course	Title	Hours
BIO 597	Instrumentation	2
CLS 201	INTRO to Med. Tech.	3
	Elective	3
	Total	8

Dependent upon the Hospital Based Program selected by the student, the following additional credit requirements will be waived:

St. Joseph Hospital:

CLS 401 Medical Tech. Hosp. Intern..... 8

(5) The Murray State University Medical Laboratory Technician programs shall provide guidance and counseling for students interested in transferring to Eastern Kentucky University and make known the conditions of this agreement to students/graduates of the Medical Laboratory Technician program.

Eastern Kentucky University shall identify a faculty member within the Medical Technology Program to serve as an advisor for transfer students. In addition, MuSU and EKU faculty members responsible for guidance and counseling will jointly develop a transfer guide sheet.

(6) If either part wishes to modify this Agreement, it is understood that students who have already transferred to Eastern Kentucky University will have the opportunity to complete their program under the conditions of this agreement.

(7) Grievances from any party associated with or influenced by these conditions of agreement shall be made known to and addressed by the appropriate departmental and/or administrative level for discussion of implications of the grievance in order to revise/amend these conditions of agreement as decided by both programs.

(8) These conditions of agreement shall be deemed invalid without the authorizing signatures representing Murray State University and Eastern Kentucky University.

(9) The conditions of this agreement shall be reviewed annually and revised or amended as agreed upon by both programs.

(10) Each program retains the right to change their curriculum and agrees to inform the other program of such changes as related to the conditions of this agreement.

Areas for Cooperation

(1) A jointly planned faculty/staff development meeting will be held annually to familiarize both faculties with the provisions and conditions of the agreement.

(2) An evaluation plan will be developed to determine the success of the transfer student and will be shared with the Murray State University MLT Program Coordinator.

I hereby accept the conditions of this agreement for transfer of credit for graduates from the Murray State University Medical Laboratory Technician Associate Degree Program to the Eastern Kentucky University Baccalaureate Degree Program in Medical Technology.

College of Allied Health & Nursing
Dean
Eastern Kentucky University

August 3, 1982
Date

Medical Technology Department Chairman
Eastern Kentucky University

Date

Dean, College of Environmental Sciences
Murray State University

6/10/82
Date

Medical Laboratory Technician Program
Coordinator
Murray State University

6/6/82
Date

Medical Technology Program Director
St. Joseph Hospital

12 August 82
Date

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE UNIVERSITY OF KENTUCKY COMMUNITY COLLEGE SYSTEM MEDICAL LABORATORY TECHNICIAN ASSOCIATE DEGREE PROGRAM TO THE EASTERN KENTUCKY UNIVERSITY BACCALAUREATE DEGREE MAJOR IN MEDICAL TECHNOLOGY

Conditions of Agreement for Transfer of Credit

According to the conditions of this agreement Medical Laboratory Technician students or graduates from the University of Kentucky Community College System can transfer to the Medical Technology Program at Eastern Kentucky University.

(1) Upon formal documentation of completion of the Medical Laboratory Technician Associate Degree Program of the University of Kentucky Community College System these graduates will be eligible for admission to the Medical Technology Bachelor Degree Program at Eastern Kentucky University.

(2) Successful completion of the Medical Laboratory Technician Degree Program is defined by the current standards of the Program; if requirements for graduation at either program change, the other program is to be notified and the conditions of this agreement reviewed.

(3) Graduates from the Medical Laboratory Technician program shall be subject to the same admission and academic policies as all applicants to the Eastern Kentucky University program.

(4) University of Kentucky Community College System graduates admitted to the Medical Technology Major at Eastern Kentucky University shall be awarded direct transfer credit and advanced placement credit as follows:

Direct Transfer Credit

Course	Title	Hours
ENG 101	Freshman Composition	3
ENG 102	Advanced Freshman Comp.	3
CHE 105 or 107 AND	Elementary Gen. Chem, I,II	4
CHE 111 or 113 OR 115	General Chemistry Lab Chem. I, II General Chemestry Lab	4
PY 110	General Psychology	3
SOC 101	Intro to Sociology	3
BSL 112 OR	Elementary Medical Microbiology	4
BIO 108-109	Principles of Microbiology & Lab	5
	Total	33 Hours

Advanced Placement Credit

MLT 100 and 200 level courses will transfer for credit for these Eastern Kentucky University course offerings:

Course	Title	Hours
BIO 597	Instrumentation	2
CLS 201	INTRO to Med. Tech.	3
	Elective	3
	Total	8

Dependent upon the Hospital Based Program selected by the student, the following additional credit requirements will be waived:

St. Joseph Hospital:

CLS 401 Medical Tech. Hosp. Intern..... 8

(5) The University of Kentucky Community College System Medical Laboratory Technician programs shall provide guidance and counseling for students interested in transferring to Eastern Kentucky University and make known the conditions of this agreement to students/graduates of the Medical Laboratory Technician program.

Eastern Kentucky University shall identify a faculty member within the Medical Technology Program to serve as an advisor for transfer students. In addition, UKCCS and EKU faculty members responsible for guidance and counseling will jointly develop a transfer guide sheet.

(6) If either part wishes to modify this Agreement, it is understood that students who have already transferred to Eastern Kentucky University will have the opportunity to complete their program under the conditions of this agreement.

(7) Grievances from any party associated with or influenced by these conditions of agreement shall be made known to and addressed by the appropriate departmental and/or administrative level for discussion of implications of the grievance in order to revise/amend these conditions of agreement as decided by both programs.

(8) These conditions of agreement shall be deemed invalid without the authorizing signatures representing the University of Kentucky Community College System and Eastern Kentucky University.

(9) The conditions of this agreement shall be reviewed annually and revised or amended as agreed upon by both programs.

(10) Each program retains the right to change their curriculum and agrees to inform the other program of such changes as related to the conditions of this agreement.

Areas for Cooperation

(1) One jointly planned faculty/staff development meeting will be held annually as needed to familiarize both faculties with the provisions and conditions of the agreement. This meeting would include all UKCCS MLT Coordinators as well as EKU faculty representation.

(2) An evaluation plan will be developed to determine the success of the transfer student and will be shared with the Community College System Office of the Vice President and MLT Program Coordinators.

I hereby accept the conditions of this agreement for transfer of credit for graduates from the University of Kentucky Community College System Medical Laboratory Technician Associate Degree Program to the Eastern Kentucky University Baccalaureate Degree Program in Medical Technology.

College of Allied Health & Nursing
Dean
Eastern Kentucky University — 6/10/82 Date

Medical Technology Department Chairman
Eastern Kentucky University — June 15, 1982 Date

Medical Technology Program Director, M.D.
St. Joseph Hospital — 7-2-82 Date

Vice President, University of Kentucky
Community College System — 6-3-82 Date

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE WATTERSON COLLEGE MEDICAL LABORATORY TECHNICIAN PROGRAM TO THE EASTERN KENTUCKY UNIVERSITY BACCALAUREATE DEGREE PROGRAM IN MEDICAL TECHNOLOGY

Conditions of Agreement for Transfer of Credit

According to the conditions of this agreement Medical Laboratory Technician graduates or students from Watterson College can transfer to the Medical Technology Program at Eastern Kentucky University.

(1) Upon formal documentation of completion of the Medical Laboratory Technician Associate Degree Program of Watterson College these graduates will be eligible for admission to the Medical Technology Bachelor Degree Major at Eastern Kentucky University.

(2) Successful completion of the Medical Laboratory Technician Degree Program is defined by the current standards of the Program; if requirements for graduation at either program change, the other program is to be notified and the conditions of this agreement reviewed.

(3) Graduates from the Medical Laboratory Technician program shall be subject to the same admission and academic policies as all applicants to the Eastern Kentucky University program.

(4) Watterson College graduates admitted to the Medical Technology Program at Eastern Kentucky University shall be awarded direct transfer credit and advanced placement credit as follows:

Direct Transfer Credit

Course	Title	Hours
MT 181	Medical Microbiology & Parasitology.....	Quarter or 4 Semester Hours
	Any Courses except Medical Laborabory Technician Courses up to	8 Semester Hours- Total 4-12 hours

Advanced Placement Credit

MT 100 and 200 level courses will transfer for credit for these Eastern Kentucky University course offerings:

Course	Title	Hours
BIO 597	Instrumentation	2
CLS 201	INTRO to Med. Tech.	3
	Elective	3
	Total	8

Dependent upon the Hospital Based Program selected by the student, the following additional credit requirements will be waived:

St. Joseph Hospital:

CLS 401 Medical Tech. Hosp. Intern..... 8

(5) Watterson College Medical Laboratory Technician program shall provide guidance and counseling for students interested in transferring to Eastern Kentucky University and make known the conditions of this agreement to students/graduates of the Medical Laboratory Technician program.

Eastern Kentucky University shall identify a faculty member within the Medical Technology Program to serve as an advisor for transfer students. In addition, Watterson College and EKU faculty members responsible for guidance and counseling will jointly develop a transfer guide sheet.

(6) If either part wishes to modify this Agreement, it is understood that students who have already transferred to Eastern Kentucky University will have the opportunity to complete their program under the conditions of this agreement.

(7) Grievances from any party associated with or influenced by these conditions of agreement shall be made known to and addressed by the appropriate departmental and/or administrative level for discussion of implications of the grievance in order to revise/amend these conditions of agreement as decided by both programs.

(8) These conditions of agreement shall be deemed invalid without the authorizing signatures representing Watterson College and Eastern Kentucky University.

(9) The conditions of this agreement shall be reviewed annually and revised or amended as agreed upon by both programs.

(10) Each program retains the right to change their curriculum and agrees to inform the other program of such changes as related to the conditions of this agreement.

Areas for Cooperation

(1) A jointly planned faculty/staff development meeting will be held annually to familiarize both faculties with the provisions and conditions of the agreement.

(2) An evaluation plan will be developed to determine the success of the transfer student and will be shared with the Watterson College MLT Program Coordinator.

I hereby accept the conditions of this agreement for transfer of credit for graduates from Watterson College Medical Laboratory Technician Associate Degree Program to the Eastern Kentucky University Baccalaureate Degree Program in Medical Technology.

Daniel D. Zak — 6/9/82
College of Allied Health & Nursing — Date
Dean
Eastern Kentucky University

Richard A. Smith — June 7, 1982
Medical Technology Department Chairman — Date
Eastern Kentucky University

O'Neal Brice — 5-28-82
President, Watterson College — Date

Sonya L. Hopkins — 5-28-82
Medical Laboratory Technician Program — Date
Watterson College

Paul C. Young, M.D. — 7-2-82
Medical Technology Program Director — Date
St. Joseph Hospital

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT AND COOPERATION BETWEEN THE MEDICAL LABORATORY TECHNICIAN PROGRAMS OF THE UNIVERSITY OF KENTUCKY COMMUNITY COLLEGE SYSTEM AND THE MEDICAL TECHNOLOGY PROGRAM AT MOREHEAD STATE UNIVERSITY

Conditions of Agreement for Transfer of Credit

According to the conditions of this agreement, Medical Laboratory Technician graduates from the University of Kentucky Community College System can transfer to the Medical Technology Program at Morehead State University.

(1) Upon formal documentation of completion of the Medical Laboratory Technician Associate Degree Program at the University of Kentucky Community College System and successful completion of the required preprofessional course work for the Medical Technology Program, these graduates will be eligible for admission to the Medical Technology Bachelor Degree Program at Morehead State University.

(2) Successful completion of the Medical Laboratory Technician Associate Degree Program is defined by the current standards of the program; if requirements for graduation at either program change the other program is to be notified and the conditions of this agreement reviewed.

(3) Graduates from the Medical Laboratory Technician Program shall be subject to the same admission and academic policies as all applicants to the Morehead State University Program.

(4) No transfer credit for professional courses (MT) will be given until the student is accepted into an approved hospital-based Medical Technology Program through the selective admissions process.

(5) If the student is admitted to the hospital-based program and the student's appropriate course work has been completed, the awarding of academic credit will be determined by the Medical Technology Coordinator of Morehead State University in conjunction with the Education Coordinator of the hospital-based Medical Technology Program. See Item 7 below.

(6) Students must earn a minimum of 32 hours of residence credit at Morehead State University to meet degree requirements. Credit hours earned while enrolled in an affiliated hospital-based Medical Technology Program will be applied toward meeting this requirement.

(7) University of Kentucky Community College System graduates admitted to the Medical Technology Program at Morehead State University shall be awarded direct transfer credit and advanced placement credit as follows:

Direct Transfer Credit

Course	Title	Hours
ENG 101	Freshman Composition	3
ENG 102	Advanced Freshman Composition	3
	Algebra or Equivalent	3
CHE 105-107 AND CHE 115 OR	General College Chemistry I and II	7
	General Chemistry Lab	3
CHE 111-113	General College Chemistry I and II and Lab	9
ANA 104 OR	Anatomy and Physiology	6
BSL 110-111 OR	Anatomy and Physiology I and II	8
ANA 206-PGY 206	Elementary Anatomy and Elementary Physiology	6
BSL 112 OR	Elementary Medical Microbiology	4
BIO 108-109	Principles of Microbiology and Introduction Microbiology Lab	5
PY 110 OR	General Psychology	3
PY 111-112 OR	Basic Psychology I and II	6
PSY 100	Introduction to Psychology	4

Total Hours.....31-35 Hours

General Education Electives*

Communication & Humanities	up to 9
Social and Behavioral Sciences	up to 9
Health	up to 3
Total Additional Hours	up to 21 hours

Advanced Placement Credit

Course	Title	Hours
MLT 100 or 130,	Introduction to Medical Laboratory Technician will transfer for credit for BIOL 333-Human Physiology Laboratory	1

*See Attachment for listing of courses applicable to general education requirements.

MLT 120 Serology or MLT 250 Medical Laboratory Technology III, will transfer for credit for BIOL 319-Immunology-Serology..... 3

MLT 210, 220 & 230, Hematology, Immunohematology & Clinical Chemistry or MLT 240 & 250 Medical Laboratory Technology II and Medical Laboratory Technology IV will transfer for credit for Science Elective..... 3
and CHEM 460, Instrumental Analysis..... 4

Total Hours.....10 Hours

Dependent upon the Hospital Based Program selected by the student, the following additional credit will be granted:

St. Joseph Hospital:

Course	Title	Hours
BIOL 413-414	Medical Technology Clinical Practicum.....	8

(8) The University of Kentucky Community College Medical Laboratory Technician Program shall provide guidance and counseling for students interested in transferring to Morehead State University and make known the conditions of this agreement to students/graduates of the Medical Laboratory Technician Program.

Morehead State University shall identify a faculty member within the Medical Technology Program to serve as an advisor for transfer students. In addition, faculty members responsible for guidance and counseling will jointly develop a transfer guide sheet.

(9) If either party wishes to modify this Agreement, it is understood that students who have already transferred to Morehead State University will have the opportunity to complete their program under the conditions of this agreement.

(10) Grievances from any party associated with or influenced by these conditions of agreement shall be made known to and addressed by the appropriate departmental and/or administrative level for discussion of implications of the grievance in order to revise/amend these conditions of agreement as decided by both programs.

(11) These conditions of agreement shall be deemed invalid without the authorizing signatures representing the University of Kentucky Community College System and Morehead State University.

(12) The conditions of this agreement shall be reviewed annually and revised or amended as agreed upon by both programs.

(13) Each program retains the right to change their curriculum and agrees to inform the other program of such changes as related to the conditions of this agreement.

Areas for Cooperation

(1) A jointly planned faculty/staff development meeting will be held annually as needed to familiarize both faculties with the provisions and conditions of the agreement.

(2) An evaluation plan will be developed to determine the success of the transfer student and will be shared with the Community College System Office of the Vice President and MLT Program Coordinators.

I hereby accept the conditions of this agreement for transfer of credit for graduates from the Medical Laboratory Technician Program of the University of Kentucky Community College System to the Medical Technology Program at Morehead State University.

C A Payne — 6-10-82
Dean of the School of Science and Mathematics, Morehead State University — Date

Jerry F Howell Jr — 6-10-82
Biological & Environmental Sciences Department Chairman, Morehead State University — Date

Ted Pass — 6/10/82
Medical Technology Coordinator, Morehead State University — Date

Paul G ..., M.D. — 6-28-82
Medical Technology Program Director, St. Joseph Hospital — Date

Charl T ... — 6-3-82
Vice President, University of Kentucky Community College System — Date

BACHELOR DEGREE REQUIREMENTS

The following GENERAL EDUCATION requirements will obtain for all bachelor's degrees:

I. Communications and Humanities — 15 hours
- A. A total of 9 hours in composition and literature
  1. 3 hours-Composition 101 or 103
  2. 3 hours-Composition 102 or 192
  3. 3 hours-Literature 202, 211, or 212

(Advanced placed students scheduled by Department of Languages and Literature)
- B. A total of 3 hours in oral communications
  1. Speech 110 or 370
- C. A total of 3 hours from one of the following fields:
  1. Fine Arts 160
  2. Foreign Languages
  3. Art 263, 264
  4. Music 161, 162, 261, 361, 362
  5. Theatre 100, 110

II. Natural and Mathematical Sciences — 12 hours

A total of 12 hours with at least 3 hours from each of the following areas
1. Mathematics 123 or higher
2. Biological Science 105 or higher
3. Physical Science 100 or higher
4. 3 hours from 1, 2, or 3 above or Data Processing 201 or Philosophy 200, 303, or 306.

III. Social and Behavioral Sciences — 12 hours

A total of 12 hours with at least 3 hours from each of the following clusters
1. History 131, 132, 141, 142
   Economics 101, 201, 202
2. Sociology 101, 170, 203, 305, 354
   Psychology 154
3. Government 141, 242, 310
   Geography 100, 211, 241, 300

IV. Health — 3 hours
- A. A total of 3 hours from either of the following
  1. Health 150 and one physical education activity class or
  2. Health 203

Bachelor's Degree General Requirements:
1. A minimum of 128 semester hours of prescribed and elective college credit.
2. An average standing of "C," or higher, on all work completed at this University.
3. Completion of an area of concentration of not less than 48 hours; or a major of not less than 30 hours and a minor of not less than 21 hours.
4. An average standing of "C," or higher, on the area of concentration.

5. At least three-fourths of the credit in residence at some standard college; at least one year in residence and one semester immediately preceding graduation in this institution. (One year in residence is interpreted as two semesters, during which a minimum of 32 hours credit is earned.)
6. Not less than 43 semester hours of work offered for the degree must have been earned in courses numbered 300 and above.

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE MEDICAL LABORATORY TECHNICIAN PROGRAM AT MIDWAY COLLEGE TO THE UNIVERSITY OF KENTUCKY MEDICAL TECHNOLOGY PROGRAM

TRANSFER OF CREDIT AGREEMENT

The specific conditions for transfer of credit are as follows:

1. Successful completion of the Medical Laboratory Technician Program.
2. Successful completion of required preprofessional course work for the Medical Technology Program.
3. Successful completion of all University of Kentucky general requirements.
4. Acceptance into the University of Kentucky Medical Technology Program.

and the conditions for successful completion of the Medical Technology Program are:

1. Completion of a minimum of 30 semester hours in the Medical Technology Program.
2. Successful completion of all Medical Technology Program requirements.

DIRECT TRANSFER CREDIT MAY BE GIVEN FOR THE FOLLOWING COURSES:

LL	101-102	English Composition	6
PSC	160-161	General Chemistry I and II	10
BIO	191	Anatomy	4
BIO	192	Physiology	4
BIO	220	Elementary Microbiology	4
MA	140	Pre-Calculus Mathematics	3
		Humanities	3
		Psychology/Social Science	3
		TOTAL	37

In addition to direct transfer credit, the University of Kentucky Medical Technology Program will award alternate upper division credit* for the following MLT courses.

MLT	201	Clinical Chemistry	5
MLT	202	Urinalysis	3
MLT	203	Hematology	2
MLT	204	Immunohematology	3
MLT	205	Medical Microbiology	3
MLT	206	Pathophysiology	2
		TOTAL	18

Upon admission to the University of Kentucky Medical Technology Program the following courses are the only ones from which the MLT applicant will be exempt in lieu of the above alternate upper division credit.

MT	831	Lab. Methodology I (UA)----------	1
MT	832	Lab. Methodology II (Clin. Chem.)----	2
MT	833	Lab. Methodology III (Hem.)----------	4
MT	834	Lab. Methodology IV (Bld. Bank)------	1
MT	860	Blood Collection----------	2
MT	870	Senior Seminar----------	1
AHE	856	Colloquium----------	2
BIO	585	Pathogenic Bacteriology----------	4
		TOTAL	17

In addition MLT graduates may request and be granted exemption from all or portions of MT 880 Clinical Practicum dependent upon their previous clinical experience. They may also request proficiency tests for any course in which they feel competent to do so.

TERMS OF AGREEMENT

The appropriate MLT faculty will share this agreement with the interested MLT students or graduates and provide counseling to said persons, in conjunction with the MT liaison from the University of Kentucky.

Grievances of an academic nature will be resolved in the manner provided by the University of Kentucky Student Code.

This agreement will be reviewed annually or whenever a change in curriculum is made by either party. Both parties reserve the right to amend or revise this agreement, to change curriculum whenever deemed feasible or to terminate the agreement with 60 days notice.

A faculty member from each institution will be appointed by each party to act as agent for implementation of this agreement, to speak for the institution and to communicate changes to respective faculty members, counselors, advisors and others to whom the information is pertinent.

We, the undersigned, do hereby accept the conditions of this agreement for transfer of credit for Medical Laboratory Technician Graduates from Midway College to the University of Kentucky Medical Technology Program.

Recommended for Approval:

Dean, College of Allied Health Professions
University of Kentucky

DATE

Department Chairman, Medical Technology
University of Kentucky

DATE

By
For University of Kentucky

DATE

Program Director, Medical Laboratory Technician
Midway College

DATE

Dean, Midway College

DATE

President, Midway College

DATE

*Alternate upper division credit is herein defined as credit accepted for comparable courses provided a grade of C (2.0) or above was earned in each accepted course. Exemption may also be claimed by successfully passing a proficiency or equivalency examination as determined by the University of Kentucky Medical Technology Program. Unless exempt the student must enroll in all required courses.

MEMORANDUM OF UNDFRSTANDING BETWEEN THE MEDICAL LABORATORY TECHNICIAN PROGRAMS OF THE UNIVERSITY OF KENTUCKY COMMUNITY COLLEGE SYSTEM AND THE UNIVERSITY OF KENTUCKY MEDICAL TECHNOLOGY PROGRAM

TRANSFER OF CREDIT POLICY

In general, students enrolled in the University of Kentucky Community Colleges are eligible to transfer to the Lexington campus provided that: 1) they are not under suspension or financially delinquent and 2) meet the admission requirements of the individual colleges for which they apply. (UK Bulletin p. 15).

All courses taken at the community college campus are transferred with credit, grades, and quality points; however, the Dean of each college decides how credits apply to the requirements for each degree. (UK Bulletin, p.15).

The specific conditions for transfer of credit are as follows:

1. Successful completion of the Medical Laboratory Technician Program.
2. Successful completion of required preprofessional course work for the Medical Technology Program.
3. Successful completion of all University of Kentucky general requirements.
4. Acceptance into the University of Kentucky Medical Technology.

and the conditions for successful completion of the Medical Technology Program are:

1. Completion of a minimum of 30 semester hours in the Medical Technology Program.
2. Successful completion of all Medical Technology Program requirements.

DIRECT TRANSFER CREDIT MAY BE GIVEN FOR THE FOLLOWING COURSES:

ENG	101-102	English Composition I and II---------	6
CHE	105-107	General College Chemistry I and II---	6
CHE	115	General Chemistry Laboratory I-------	3 or
CHE	111-113	General Chemistry Lab. I and II------	(4)
PGY	206	Elementary Physiology----------	3 and/or
ANA	206	Elementary Anatomy----------	(3) or
ANA	104	Anatomy and Physiology----------	(4) or
BSL	110-111	Anatomy and Physiology I and II------	(4 or 8)
BIO	108-109	General Microbiology with Lab.-------	5 or
BSL	112	Elementary Medical Microbiology------	(4)
PY	110	General Psychology----------	(3) or
PY	111-112	Basic Psychology I and II----------	(3 or 6) or
PSY	100	Introduction to Psychology----------	4
SOC	101	Introduction to Sociology----------	3
MA	XXX	Mathematics----------	3 or 6
		Electives----------	3 or 6
		TOTAL	36 - 50

In addition to direct transfer credit, the University of Kentucky Medical Technology Program will award alternate upper division credit* for the following MLT courses.

MLT	110	Urinalysis----------	1
MLT	230	Clinical Chemistry----------	4
MLT	120	Serology----------	1
MLT	210	Hematology----------	4
MLT	100	Introduction to MLT----------	4
MLT	200-201	Applied Clinical Microbiology-------	4
		TOTAL	18

Upon admission to the University of Kentucky Medical Technology Program the following courses are the only ones from which the MLT applicant will be exempt in lieu of the above alternate upper division credit.

MT	831	Lab. Methodology I (UA)----------	1
MT	832	Lab. Methodology II (Clin. Chem.)----	2
MT	833	Lab. Methodology III (Hem.)----------	4
MT	834	Lab. Methodology IV (Bld. Bank)------	1
MT	860	Blood Collection----------	2
MT	870	Senior Seminar----------	1
AHE	856	Colloquium----------	2
BIO	585	Pathogenic Bacteriology----------	4
		TOTAL	17

In addition MLT graduates may request and be granted exemption from all or portions of MT 880 Clinical Practicum dependent upon their previous clinical experience. They may also request proficiency tests for any course in which they feel competent to do so.

TERMS OF MEMORANDUM

The appropriate MLT faculty will share this memorandum with the interested MLT students or graduates and provide counseling to said persons, in conjunction with the MT liaison from the University of Kentucky.

Grievances of an academic nature will be resolved in the manner provided by the University of Kentucky Student Code.

This memorandum will be reviewed annually or whenever a change in curriculum is made by either party. Both parties reserve the right to amend or revise this memorandum, to change curriculum whenever deemed feasible or to terminate the memorandum with 60 days notice.

A faculty member from each institution will be appointed by each party to act as agent for implementation of this memorandum, to speak for the institution and to communicate changes to respective faculty members, counselors, advisors and others to whom the information is pertinent.

We, the undersigned, do hereby accept the conditions of this memorandum for transfer of credit for Medical Laboratory Technician Graduates from the University of Kentucky Community College System to the University of Kentucky Medical Technology Program.

Recommended for Approval:

_____ _____

Dean, College of Allied Health Professions DATE
University of Kentucky

_____ _____

Department Chairman, Medical Technology DATE
University of Kentucky

_____ _____

Chancellor DATE
University of Kentucky Community College System

By _____ _____

For University of Kentucky DATE

*Alternate upper division credit is herein defined as credit accepted for comparable courses provided a grade of C (2.0) or above was earned in each accepted course. Exemption may also be claimed by successfully passing a proficiency or equivalency examination as determined by the University of Kentucky Medical Technology Program. Unless exempt the student must enroll in all required courses.

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE MEDICAL LABORATORY TECHNICIAN PROGRAM AT EASTERN KENTUCKY UNIVERSITY TO THE UNIVERSITY OF KENTUCKY MEDICAL TECHNOLOGY PROGRAM

TRANSFER OF CREDIT AGREEMENT

The specific conditions for transfer of credit are as follows:

1. Successful completion of the Medical Laboratory Technician Program.
2. Successful completion of required preprofessional course work for the Medical Technology Program.
3. Successful completion of all University of Kentucky general requirements.
4. Acceptance into the University of Kentucky Medical Technology Program.

and the conditions for successful completion of the Medical Technology Program are:

1. Completion of a minimum of 30 semester hours in the Medical Technology Program.
2. Successful completion of all Medical Technology Program requirements.

DIRECT TRANSFER CREDIT MAY BE GIVEN FOR THE FOLLOWING COURSES:

ENG	101-102	English Composition I and II---------	6
CHE	111-112	Introductory Chemistry I and II------	9
BIO	276	Medical Microbiology (with Lab)------	5
BIO	348	General Physiology (with Lab)--------	4
CHE	330	Introductory Biochemistry----------	3
MAT	107	College Algebra I-------------------	3
AHN	200	Medical Terminology-----------------	3
		Electives---------------------------	6
		TOTAL	39

In addition to direct transfer credit, the University of Kentucky Medical Technology Program will award alternate upper division credit* for the following MLT courses.

MLT	201	Medical Lab. Technician I (UA)-------	3
MLT	202, 203	Medical Lab. Technician II and III---	6
MLT	205	Practicum I-------------------------	6
MLT	207	Technical Correlations--------------	3
		TOTAL	18

Upon admission to the University of Kentucky Medical Technology Program the following courses are the only ones from which the MLT applicant will be exempt in lieu of the above alternate upper division credit.

MT	831	Lab. Methodology I (UA)----------	1
MT	832	Lab. Methodology II (Clin. Chem.)----	2
MT	833	Lab. Methodology III (Hem.)----------	4
MT	834	Lab. Methodology IV (Bld. Bank)------	1
MT	860	Blood Collection----------	2
MT	870	Senior Seminar----------	1
AHE	856	Colloquium----------	2
BIO	585	Pathogenic Bacteriology----------	4
		TOTAL	17

In addition MLT graduates may request and be granted exemption from all or portions of MT 880 Clinical Practicum dependent upon their previous clinical experience. They may also request proficiency tests for any course in which they feel competent to do so.

TERMS OF AGREEMENT

The appropriate MLT faculty will share this agreement with the interested MLT students or graduates and provide counseling to said persons, in conjunction with the MT liaison from the University of Kentucky.

Grievances of an academic nature will be resolved in the manner provided by the University of Kentucky Student Code.

This agreement will be reviewed annually or whenever a change in curriculum is made by either party. Both parties reserve the right to amend or revise this agreement, to change curriculum whenever deemed feasible or to terminate the agreement with 60 days notice.

A faculty member from each institution will be appointed by each party to act as agent for implementation of this agreement, to speak for the institution and to communicate changes to respective faculty members, counselors, advisors and others to whom the information is pertinent.

We, the undersigned, do hereby accept the conditions of this agreement for transfer of credit for Medical Laboratory Technician Graduates from Eastern Kentucky University to the University of Kentucky Medical Technology Program.

Recommended for Approval:

_____ _____

Dean, College of Allied Health Professions DATE
University of Kentucky

Department Chairman, Medical Technology
University of Kentucky

DATE

College of Allied Health and Nursing
Dean
Eastern Kentucky University

DATE

Medical Technology Chairman
Eastern Kentucky University

DATE

By
For University of Kentucky

DATE

*Alternate upper division credit is herein defined as credit accepted for comparable courses provided a grade of C (2.0) or above was earned in each accepted course. Exemption may also be claimed by successfully passing a proficiency or equivalency examination as determined by the University of Kentucky Medical Technology Program. Unless exempt the student must enroll in all required courses.

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE MEDICAL LABORATORY TECHNICIAN PROGRAM AT MURRAY STATE UNIVERSITY TO THE UNIVERSITY OF KENTUCKY MEDICAL TECHNOLOGY PROGRAM

TRANSFER OF CREDIT AGREEMENT

The specific conditions for transfer of credit are as follows:

1. Successful completion of the Medical Laboratory Technician Program.
2. Successful completion of required preprofessional course work for the Medical Technology Program.
3. Successful completion of all University of Kentucky general requirements.
4. Acceptance into the University of Kentucky Medical Technology Program.

and the conditions for successful completion of the Medical Technology Program are:

1. Completion of a minimum of 30 semester hours in the Medical Technology Program.
2. Successful completion of all Medical Technology Program requirements.

DIRECT TRANSFER CREDIT MAY BE GIVEN FOR THE FOLLOWING COURSES:

ENG	101	Composition----------	3
ENG	102	Composition and Research----------	3
CHE	105	Introduction to College Chemistry-------	4
CHE	106	General Chemistry----------	4 or
CHE	121	General College Chemistry----------	(5) or
CHE	122	General Chemistry and Qual. Analysis----	(5)
CHE	205	Brief Analytical Chemistry----------	2 and
CHE	206	Analytical Chemistry Laboratory---------	2
CHE	210	Brief Organic Chemistry----------	3
CHE	215	Organic Chemistry Laboratory----------	1
CHE	330	Basic Biochemistry----------	3
BIO	101	General Biology----------	4 or
BIO	121	General Zoology----------	(4)
BIO	228	Human Anatomy and Physiology----------	4
BIO	400 or 300	Introduction to Microbiology----------	4
MAT	110	Algebra and Trigonometry----------	5
		Electives----------	6 - 12
		TOTAL	48 - 56

In addition to direct transfer credit, the University of Kentucky Medical Technology Program will award alternate upper division credit* for the following MLT courses.

BIO	134, 135	Summer Practicum I----------	12
BIO	130	Introduction to the Clinical Laboratory-	3
BIO	131	Medical Laboratory Technology I---------	3
		TOTAL	18

Upon admission to the University of Kentucky Medical Technology Program the following courses are the only ones from which the MLT applicant will be exempt in lieu of the above alternate upper division credit.

MT	831	Lab. Methodology I (UA)----------	1
MT	832	Lab. Methodology II (Clin. Chem.)-------	2
MT	833	Lab. Methodology III (Hem.)----------	4
MT	834	Lab. Methodology IV (Bld. Bank)---------	1
MT	860	Blood Collection----------	2
AHE	855	Colloquium----------	2
BIO	585	Pathogenic Bacteriology----------	4
MT	870	Senior Seminar----------	1
		TOTAL	17

In addition MLT graduates may request and be granted exemption from all or portions of MT 880 Clinical Practicum dependent upon their previous clinical experience. They may also request proficiency tests for any course in which they feel competent to do so.

TERMS OF AGREEMENT

The appropriate MLT faculty will share this agreement with the interested MLT students or graduates and provide counseling to said persons, in conjunction with the MT liaison from the University of Kentucky.

Grievances of an academic nature will be resolved in the manner provided by the University of Kentucky Student Code.

This agreement will be reviewed annually or whenever a change in curriculum is made by either party. Both parties reserve the right to amend or revise this agreement, to change curriculum whenever deemed feasible or to terminate the agreement with 60 days notice.

A faculty member from each institution will be appointed by each party to act as agent for implementation of this agreement, to speak for the institution and to communicate changes to respective faculty members, counselors, advisors and others to whom the information is pertinent.

We, the undersigned, do hereby accept the conditions of this agreement for transfer of credit for Medical Laboratory Technician Graduates from Murray State University to the University of Kentucky Medical Technology Program.

Recommended for Approval:

Dean, College of Allied Health Professions
University of Kentucky _____ DATE

Department Chairman, Medical Technology
University of Kentucky _____ DATE

By _____
For University of Kentucky _____ DATE

Dean, College of Environmental Sciences
Murray State University _____ DATE

Medical Laboratory Technician Program
Coordinator
Murray State University _____ DATE

*Alternate upper division credit is herein defined as credit accepted for comparable courses provided a grade of C (2.0) or above was earned in each accepted course. Exemption may also be claimed by successfully passing a proficiency or equivalency examination as determined by the University of Kentucky Medical Technology Program. Unless exempt the student must enroll in all required courses.

CONDITION OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE MEDICAL LABORATORY TECHNICIAN PROGRAM AT MADISONVILLE AREA VOCATIONAL SCHOOL TO THE UNIVERSITY OF KENTUCKY MEDICAL TECHNOLOGY PROGRAM

The University of Kentucky Medical Technology Program will award alternate upper division credit* (AUD) for the following MLT-C courses after acceptance into the program.

Introduction to Laboratory Techniques	6
Introduction to Chemistry	2.5
Hematology Theory and Technique	4
Serology Theory and Technique	2.2
Laboratory Safety	.5
Anatomy and Physiology	1
TOTAL	12.2

Upon Admission to the University of Kentucky Medical Technology Program the following courses are the only ones from which the MLT applicant will be exempt in lieu of the above alternate upper division credit (AUD).

MT 831	Laboratory Methodology I (UA)	1
MT 832	Laboratory Methodology II (Clin. Chem.)	2
MT 833	Laboratory Methodology III (Hem.)	4
MT 834	Laboratory Methodology IV (Bld. Bank)	1
MT 860	Blood Collection	2
MT 870	Senior Seminar	1
	TOTAL	11

In addition MLT graduates may request and be granted exemption from all or portions of MT 880 Clinical Practicum dependent upon their previous clinical experience. They may also request proficiency tests for any course in which they feel competent to do so.

TERMS OF AGREEMENT

The appropriate MLT faculty will share this agreement with the interested MLT students or graduates and provide counseling to said persons, in conjunction with the MT liaison from the University of Kentucky.

Grievances will be resolved in the manner provided by the University of Kentucky Student Code.

*Alternate upper division credit (AUD) is herein defined as credit accepted for comparable courses provided a grade of B (3.0) or above was earned in each accepted course. An examination may be taken to claim exemption if less than 3.0 was earned in any course or the course may be retaken if desired.

This agreement will be reviewed annually or whenever a change in curriculum is made by either party. Both parties reserve the right to amend or revise this agreement, to change curriculum whenever deemed feasible or to terminate the agreement with 60 days notice.

A faculty liaison will be appointed by both parties to act as agent for implementation of this agreement, to speak for the institution and to communicate changes to respective faculty members, counselors, advisors and others to whom the information is pertinent.

We, the undersigned, do hereby accept the conditions of this agreement for transfer of credit for Medical Laboratory Technician Graduates from the Madisonville Area Vocational School to the University of Kentucky Medical Technology Program.

Dean, College of Allied Health Professions	DATE
Department Chairman, Medical Technology	DATE
Vice President, Madisonville Area Vocational School	DATE

CONDITION OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE MEDICAL LABORATORY TECHNICIAN PROGRAM AT WATTERSON COLLEGE TO THE UNIVERSITY OF KENTUCKY MEDICAL TECHNOLOGY PROGRAM

The University of Kentucky Medical Technology Program will award alternate upper division credit* (AUD) for the following MLT courses after acceptance into the program.

AH 100	Orientation to Medical Technology	1
AH 105	Anatomy	4
AH 106	Anatomy and Physiology	4
AH 145	Medical Law and Ethics	3
AH 180	Basic Microbiology	2
MT 105	Introduction to Medical Technology	2
MT 115	Macro Blood Counts and Urine	2
MT 116	Micro Blood Counts and Urine	2
MT 117	Special Hematology	4
MT 125	Immunology-Coagulation	4
MT 215	Routine Chemistry	4
MT 216	Special Chemistry	5
	TOTAL	37

Upon Admission to the University of Kentucky Medical Technology Program the following courses are the only ones from which the MLT applicant will be exempt in lieu of the above alternative upper division credit (AUD).

MT 831	Laboratory Methodology I (UA)	1
MT 832	Laboratory Methodology II (Clin. Chem)	2
MT 834	Laboratory Methodology IV (Hem.)	4
MT 860	Blood Collection	2
AHE 856	Colloquium	2
	TOTAL	11

In addition MLT graduates may request and be granted exemption from all or portions of MT 880 Clinical Practicum dependent upon their previous clinical experience. They may also request proficiency tests for <u>any</u> course in which they feel competent to do so.

<u>TERMS OF AGREEMENT</u>

The appropriate MLT faculty will share this agreement with the interested MLT students or graduates and provide counseling to said persons, in conjunction with the MT liaison from the University of Kentucky.

Grievances will be resolved in the manner provided by the University of Kentucky Student Code.

This agreement will be reviewed annually or whenever a change in curriculum is made by either party. Both parties reserve the right to amend or revise this agreement, to change curriculum whenever deemed feasible or to terminate the agreement with 60 days notice.

A faculty liaison will be appointed by other parties to act an agent for implementation of this agreement, to speak for the institution and to communicate changes to respective faculty members, counselors, advisors and others to whom the information is pertinent.

We, the undersigned, do hereby accept the conditions of this agreement for transfer of credit for Medical Laboratory Technician Graduates from Watterson College to the University of Kentucky Medical Technology Program.

Dean, College of Allied Health Professions	DATE
Department Chairman, Medical Technology	DATE
Vice President, Watterson College	DATE

*Alternate upper division unit (AUD) is herein defined as credit accepted for comparable courses provided a grade of B (3.0) or above was earned in each accepted course. An examination may be taken to claim exemption if less than 3.0 was earned in any course or the course may be retaken if desired.

DRAFT 4/12/82

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE UNIVERSITY OF KENTUCKY COMMUNITY COLLEGE SYSTEM ASSOCIATE DEGREE MEDICAL LABORATORY TECHNICIAN PROGRAM TO THE UNIVERSITY OF LOUISVILLE PROGRAM IN MEDICAL TECHNOLOGY

Conditions of Agreement for the Transfer of Credit

According to the conditions of this agreement, Medical Laboratory Technician graduates from the University of Kentucky Community College System Medical Laboratory Technician Programs can transfer to the Medical Technology Program at the University of Louisville. These graduates must meet the following criteria to be eligible for admission to the Medical Technology Program at the University of Louisville.

(1) Pre-Professional Requirements: Departmental

By the date of registration:

(a) complete the 92 semester hours of preprofessional courses required by the University of Louisville College of Arts and Sciences for the Science-Medical Technology Degree

OR

(b) complete a baccalaureate degree at the U of L or another university or college, including the minimum preprofessional requirements of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

OR

(c) fulfill preprofessional requirements for a baccalaureate degree at another university or college including the minimum pre-professional requirements of NAACLS and secure permission from their home college to earn credits toward the degree in the Medical Technology Program at the University of Louisville (Visiting Students)

(2) Minimum Preprofessional Requirements:
National Accrediting Agency for Clinical Laboratory Sciences

(a) Chemistry*

16 semester hours (or 24 quarter hours)
Organic and/or biological chemistry must be included

*The content of chemistry and biological science courses must be acceptable toward a major in those fields or in medical technology, or be certified by the college/university as equivalent. Survey courses do not qualify as fulfillment of chemistry or biological science prerequisites.

Individuals who have met the minimum preprofessional requirements seven or more years prior to the date of enrollment need additional work before qualifying.

(b) Biological Science*

16 semester hours (or 24 quarter hours)
Microbiology (including bacteriology) is required;
Immunology must be included either as a part of microbiology or as a separate course

(c) Mathematics

A minimum of one course in college level mathematics is required. Remedial courses will not satisfy the mathematics requirements.

(3) Additional Requirements

(a) Minimum overall grade point average in preprofessional college work of 2.5/4.0.

(b) Minimum grade point average in science and math courses of 2.5/4.0.

(c) Minimum grade of C in each required science course.

(d) Allied Health Professions Admissions Test scores submitted by the time of admission.

(e) Personal interview.

(4) Educational Requirements

(a) Applicants must provide formal documentation of completion of the Medical Laboratory Technician Certificate Program at the Madisonville Area Vocational Technical School.

(5) Certification and Work Experience

(a) Individuals must have been certified within the last five years by one of the following and must be prepared to present formal documentation of this accomplishment.

(1) as MLT by the American Society of Clinical Pathologists (ASCP)
(2) as CLT by the National Certification Agency for Medical Laboratory Personnel (NCA)
(3) as RLT by the International Society for Clinical Laboratory Technology (ISCLT)

*The content of chemistry and biological science courses must be acceptable toward a major in those fields or in medical technology, or be certified by the college/university as equivalent. Survey courses do not qualify as fulfillment of chemistry or biological science prerequisites.

Individuals who have met the minimum preprofessional requirements seven or more years prior to the date of enrollment need additional work before qualifying.

(b) MLT applicants must have acceptable work experience in medical laboratory technology.

Acceptable work experience shall be defined as equivalent full-time work experience in a laboratory engaged in medical diagnostic testing of human beings. Further, the amount of full-time equivalent work experience required shall be in direct proportion to the amount of time elapsed since the date of certification:

Time elapsed since successful certification	Full-time equivalent work experience required
two years or less	no work experience required
more than two years but no more than three years	one year experience
more than three years but no more than four years	one and one half years experience
more than four years but no more than five years	two years experience

(6) Two letters of recommendation from medical laboratory supervisors must describe the work of the applicant to the degree that an evaluation of the variety of experience as well as quality of performance may be made by the University of Louisville Faculty member responsible for this aspect of admissions;

(7) Successful completion of the Medical Laboratory Technician Certificate Degree Program is defined by the current standards of the program; if requirements for graduation at either program change, the other program is to be notified in writing and the conditions of this agreement reviewed.

(8) Medical Laboratory Technician applicants will be selected for acceptance in the Medical Technology Program on a competitive basis according to the selective admissions process of the program.

(9) Madisonville Area Vocational Technical School graduates meeting requirements for admission stated in items 1-6 above shall be awarded advanced placement credit as follows:

Direct Transfer Credit

Course		Semester Hours
ENG 101	Freshman Composition	3
ENG 102	Advanced Freshman Composition	3
CMS 151-152	Composition for Technical Students I and II	6
ANA 104 OR	Anatomy and Physiology	4
BSL 110-111 OR	Anatomy and Physiology I and II	8
ANA 206 AND	Elementary Anatomy	3
PGY 206	Elementary Physiology	3
BIO 108-109	Principles of Microbiology and Lab.....	5
CHE 105-107 OR	General College Chem. I and II	7
CHE 111-112 AND	General College Chem. I and II	6
CHE 115	General College Chem. and Lab.	3
PY 110 OR	General Psychology	3
PY 111-112 OR	Basic Psychology I and II	6
PSY 100	Introduction to Psychology	4
Plus Possible Transfer of Electives		3-6
		28-40 hours

Advanced Placement Credit

Course		Semester Hours	Contact Hours
MT 201-301	Intro. to Medical Tech. I & II	2	-
MT 461	Microbiology Lab I	2	112
MT 464	Immunology - Serology I	1	16
MT 465	Immunology - Serology Lab I	0.5	28
MT 468	Immunohematology I	1	16
MT 469	Blood Bank Lab I	1	84
MT 472	Hematology I	2	48
MT 473	Hematology Lab I	2	112
MT 476	Biochemistry - Urinalysis I	3	48
MT 477	Clinical Chemistry Lab I	2	112
MT 481	Urinalysis Lab	0.5	28
		17	576

(10) The University of Kentucky Community College System Medical Laboratory Technician Program coordinators shall provide guidance and counseling for students interested in transferring to the University of Louisville Medical Technology Program and shall make known the conditions of this agreement to students/graduates of the Medical Laboratory Technician program.

The University of Louisville shall identify a faculty member within the Medical Technology Program to serve as an advisor for transfer students. In addition the University of Kentucky Community College System and University of Louisville faculty members responsible for guidance and counseling will jointly develop a transfer guide sheet.

(11) If either party wishes to modify this Agreement, it is understood that students who have already transferred to the University of Louisville will have the opportunity to complete their program under the conditions of this agreement.

(12) Grievances from any party associated with or influenced by these conditions of agreement shall be made known to and addressed by the appropriate departmental and/or administrative level for discussion of implications of the grievance in order to revise/amend these conditions of agreement as decided by both programs.

(13) These conditions of agreement shall be deemed invalid without the authorizing signatures representing the University of Kentucky Community College System and the University of Louisville.

(14) The conditions of this agreement shall be reviewed annually and revised or amended as agreed upon by both programs.

(15) Program faculty retain the right to change their curriculum and agree to inform the other program of such changes as related to the conditions of this agreement.

Areas for Cooperation

(1) A jointly planned faculty/staff development meeting will be held annually as needed to familiarize both faculties with the provisions and conditions of the agreement.

(2) An evaluation plan will be developed to determine the success of the transfer student. The results of this evaluation shall be shared with the program coordinator at the sending institution and the University of Kentucky Community College System Office of the Vice-President.

I hereby accept the conditions of this agreement for transfer of credit for graduates from the Medical Laboratory Technician Associate Degree Programs of the University of Kentucky Community College System to the Medical Technology Program at the University of Louisville.

Special Assistant to the President for Health Affairs University of Louisville	Date
Medical Technology Program University of Louisville	Date
Vice President University of Kentucky Community College System	Date

DRAFT 4-12-82

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE MADISONVILLE AREA VOCATIONAL TECHNICAL SCHOOL CERTIFICATE MEDICAL LABORATORY TECHNICIAN PROGRAM TO THE UNIVERSITY OF LOUISVILLE PROGRAM IN MEDICAL TECHNOLOGY

Conditions of Agreement for the Transfer of Credit

According to the conditions of this agreement, Medical Laboratory Technician graduates from the Madisonville Area Vocational Technical School Medical Laboratory Technician Program can transfer to the Medical Technology Program at the University of Louisville. These graduates must meet the following criteria to be eligible for admission to the Medical Technology Program at the University of Louisville:

(1) Pre-Professional Requirements: Departmental

By the date of registration:

(a) complete the 92 semester hours of preprofessional courses required by the University of Louisville College of Arts and Sciences for the Science-Medical Technology Degree

OR

(b) complete a baccalaureate degree at the U of L or another university or college, including the minimum preprofessional requirements of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

OR

(c) fulfill preprofessional requirements for a baccalaureate degree at another university or college including the minimum preprofessional requirements of NAACLS and secure permission from their home college to earn credits toward the degree in the Medical Technology Program at the University of Louisville (Visiting Students)

(2) Minimum Preprofessional Requirements:
National Accrediting Agency for Clinical Laboratory Sciences

(a) Chemistry*

16 semester hours (or 24 quarter hours)
Organic and/or biological chemistry must be included

*The content of chemistry and biological science courses must be acceptable toward a major in those fields or in medical technology, or be certified by the college/university as equivalent. Survey courses do not qualify as fulfillment of chemistry or biological science prerequisites.

Individuals who have met the minimum preprofessional requirements seven or more years prior to the date of enrollment need additional work before qualifying.

(b) Biological Science*

16 semester hours (or 24 quarter hours)
Microbiology (including bacteriology) is required;
Immunology must be included either as a part of microbiology or as a separate course

(c) Mathematics

A minimum of one course in college level mathematics is required. Remedial courses will not satisfy the mathematics requirements.

(3) Additional Requirements

(a) Minimum overall grade point average in preprofessional college work of 2.5/4.0.

(b) Minimum grade point average in science and math courses of 2.5/4.0.

(c) Minimum grade of C in each required science course.

(d) Allied Health Professions Admissions Test scores submitted by the time of admission.

(e) Personal interview.

(4) Educational Requirements

(a) Applicants must provide formal documentation of completion of the Medical Laboratory Technician Certificate Program at the Madisonville Area Vocational Technical School.

(5) Certification and Work Experience

(a) Individuals must have been certified within the last five years by one of the following and must be prepared to present formal documentation of this accomplishment.

(1) as MLT by the American Society of Clinical Pathologists (ASCP)
(2) as CLT by the National Certification Agency for Medical Laboratory Personnel (NCA)
(3) as RLT by the International Society for Clinical Laboratory Technology (ISCLT)

*The content of chemistry and biological science courses must be acceptable toward a major in those fields or in medical technology, or be certified by the college/university as equivalent. Survey courses do not qualify as fulfillment of chemistry or biological science prerequisites.

Individuals who have met the minimum preprofessional requirements seven or more years prior to the date of enrollment need additional work before qualifying.

(b) MLT applicants must have acceptable work experience in medical laboratory technology.

Acceptable work experience shall be defined as equivalent full-time work experience in a laboratory engaged in medical diagnostic testing of human beings. Further, the amount of full-time equivalent work experience required shall be in direct proportion to the amount of time elapsed since the date of certification:

Time elapsed since successful certification	Full-time equivalent work experience required
two years or less	no work experience required
more than two years but no more than three years	one year experience
more than three years but no more than four years	one and one half years experience
more than four years but no more than five years	two years experience

(6) Two letters of recommendation from medical laboratory supervisors must describe the work of the applicant to the degree that an evaluation of the variety of experience as well as quality of performance may be made by the University of Louisville Faculty member responsible for this aspect of admissions;

(7) Successful completion of the Medical Laboratory Technician Certificate Degree Program is defined by the current standards of the program; if requirements for graduation at either program change, the other program is to be notified in writing and the conditions of this agreement reviewed.

(8) Medical Laboratory Technician applicants will be selected for acceptance in the Medical Technology Program on a competitive basis according to the selective admissions process of the program.

(9) Madisonville Area Vocational Technical School graduates meeting requirements for admission stated in items 1-6 above shall be awarded advanced placement credit as follows:

Advanced Placement Credit

	Course	Semester Hours	Contact Hours
MT 201-301	Intro. to Medical Tech. I & II	2	-
MT 461	Microbiology Lab I	2	112
MT 464	Immunology - Serology I	1	16
MT 465	Immunology - Serology Lab I	0.5	28
MT 473	Hematology Lab I	2	112
MT 477	Clinical Chemistry Lab I	2	112
MT 481	Urinalysis Lab	0.5	28
		10	408

Additional Advanced Credit may be granted based upon the following conditions:

Course No.	Title	Condition	Semester Hours	Contact Hours
MT 460	Microbiology I	TO*	4	64
MT 488	Immunohematology I	TO* or IE**	1	16
MT 469	Blood Bank Lab I	TO* or IE**	1	84
MT 472	Hematology I	TO* or IE**	2	48
MT 476	Biochemistry - Urinalysis I		3	48
	Biochemistry	Waive		
	Urinalysis	TO* or IE**		
			11	260

*TO = Test Out
**IE = Individual Evaluation

(10) The Madisonville Area Vocational Technical School Medical Laboratory Technician Program coordinator shall provide guidance and counseling for students interested in transferring to the University of Louisville Medical Technology Program and shall make known the conditions of this agreement to students/graduates of the Medical Laboratory Technician program.

The University of Louisville shall identify a faculty member within the Medical Technology Program to serve as an advisor for transfer students. In addition the Madisonville Area Vocational Technical School and University of Louisville faculty members responsible for guidance and counseling will jointly develop a transfer guide sheet.

(11) If either party wishes to modify this Agreement, it is understood that students who have already transferred to the University of Louisville will have the opportunity to complete their program under the conditions of this agreement.

(12) Grievances from any party associated with or influenced by these conditions of agreement shall be made known to and addressed by the appropriate departmental and/or administrative level for discussion of implications of the grievance in order to revise/amend these conditions of agreement as decided by both programs.

(13) These conditions of agreement shall be deemed invalid without the authorizing signatures representing the Madisonville Area Vocational Technical School and the University of Louisville.

(14) The conditions of this agreement shall be reviewed annually and revised or amended as agreed upon by both programs.

(15) Program faculty retain the right to change their curriculum and agree to inform the other program of such changes as related to the conditions of this agreement.

Areas for Cooperation

(1) A jointly planned faculty/staff development meeting will be held annually to familiarize both faculties with the provisions and conditions of the agreement.

(2) An evaluation plan will be developed to determine the success of the transfer student. The results of this evaluation shall be shared with the Medical Laboratory Technician program coordinator at Madisonville Vocational Technical School.

I hereby accept the conditions of this agreement for transfer of credit for graduates from the Medical Laboratory Technician Certificate Degree Program of the Madisonville Area Vocational Technical School to the Medical Technology Program at the University of Louisville.

_____ _____

Special Assistant to the President for Health Affairs
University of Louisville

Date

_____ _____

Medical Technology Department
University of Louisville

Date

_____ _____

Assistant Superintendent
Bureau of Vocational Education

Date

_____ _____

Medical Laboratory Technician Program
Madisonville Area Vocational Technical School

Date

DRAFT 4/12/82

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE MURRAY STATE UNIVERSITY ASSOCIATE DEGREE MEDICAL LABORATORY TECHNICIAN PROGRAM TO THE UNIVERSITY OF LOUISVILLE PROGRAM IN MEDICAL TECHNOLOGY

Conditions of Agreement for the Transfer of Credit

According to the conditions of this agreement, Medical Laboratory Technician graduates from the Murray State University Medical Laboratory Technician Programs can transfer to the Medical Technology Program at the University of Louisville. These graduates must meet the following criteria to be eligible for admission to the Medical Technology Program at the University of Louisville.

(1) Pre-Professional Requirements: Departmental

By the date of registration:

(a) complete the 92 semester hours of preprofessional courses required by the University of Louisville College of Arts and Sciences for the Science-Medical Technology Degree

OR

(b) complete a baccalaureate degree at the U of L or another university or college, including the minimum preprofessional requirements of the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

OR

(c) fulfill preprofessional requirements for a baccalaureate degree at another university or college including the minimum preprofessional requirements of NAACLS and secure permission from their home college to earn credits toward the degree in the Medical Technology Program at the University of Louisville (Visiting Students)

(2) Minimum Preprofessional Requirements:
National Accrediting Agency for Clinical Laboratory Sciences

(a) Chemistry*

16 semester hours (or 24 quarter hours)
Organic and/or biological chemistry must be included

*The content of chemistry and biological science courses must be acceptable toward a major in those fields or in medical technology, or be certified by the college/university as equivalent. Survey courses do not qualify as fulfillment of chemistry or biological science prerequisites.

Individuals who have met the minimum preprofessional requirements seven or more years prior to the date of enrollment need additional work before qualifying.

(b) Biological Science*

16 semester hours (or 24 quarter hours)
Microbiology (including bacteriology) is required;
Immunology must be included either as a part of microbiology or as a separate course

(c) Mathematics

A minimum of one course in college level mathematics is required. Remedial courses will not satisfy the mathematics requirements.

(3) Additional Requirements

(a) Minimum overall grade point average in preprofessional college work of 2.5/4.0.

(b) Minimum grade point average in science and math courses of 2.5/4.0.

(c) Minimum grade of C in each required science course.

(d) Allied Health Professions Admissions Test scores submitted by the time of admission.

(e) Personal interview.

(4) Educational Requirements

(a) Applicants must provide formal documentation of completion of the Medical Laboratory Technician Certificate Program at the Madisonville Area Vocational Technical School.

(5) Certification and Work Experience

(a) Individuals must have been certified within the last five years by one of the following and must be prepared to present formal documentation of this accomplishment.

(1) as MLT by the American Society of Clinical Pathologists (ASCP)
(2) as CLT by the National Certification Agency for Medical Laboratory Personnel (NCA)
(3) as RLT by the International Society for Clinical Laboratory Technology (ISCLT)

*The content of chemistry and biological science courses must be acceptable toward a major in those fields or in medical technology, or be certified by the college/university as equivalent. Survey courses do not qualify as fulfillment of chemistry or biological science prerequisites.

Individuals who have met the minimum preprofessional requirements seven or more years prior to the date of enrollment need additional work before qualifying.

(b) MLT applicants must have acceptable work experience in medical laboratory technology.

Acceptable work experience shall be defined as equivalent full-time work experience in a laboratory engaged in medical diagnostic testing of human beings. Further, the amount of full-time equivalent work experience required shall be in direct proportion to the amount of time elapsed since the date of certification:

Time elapsed since successful certification	Full-time equivalent work experience required
two years or less	no work experience required
more than two years but no more than three years	one year experience
more than three years but no more than four years	one and one half years experience
more than four years but no more than five years	two years experience

(6) Two letters of recommendation from medical laboratory supervisors must describe the work of the applicant to the degree that an evaluation of the variety of experience as well as quality of performance may be made by the University of Louisville Faculty member responsible for this aspect of admissions;

(7) Successful completion of the Medical Laboratory Technician Certificate Degree Program is defined by the current standards of the program; if requirements for graduation at either program change, the other program is to be notified in writing and the conditions of this agreement reviewed.

(8) Medical Laboratory Technician applicants will be selected for acceptance in the Medical Technology Program on a competitive basis according to the selective admissions process of the program.

(9) Madisonville Area Vocational Technical School graduates meeting requirements for admission stated in items 1-6 above shall be awarded advanced placement credit as follows:

Advanced Placement Credit

Course		Semester Hours	Contact Hours
MT 201-301	Intro. to Medical Tech. I & II	2	-
MT 464	Immunology - Serology I	1	16
MT 465	Immunology - Serology Lab I	0.5	28
MT 468	Immunohematology I	1	16
MT 469	Blood Bank Lab I	1	84
MT 473	Hematology Lab I	2	112
MT 476	Biochemistry - Urinalysis I	3	48
MT 477	Clinical Chemistry Lab I	2	112
MT 481	Urinalysis Lab	0.5	28
		13	444

Additional Advanced Credit may be granted based upon the following conditions:

Course No.	Title	Condition	Semester Hours	Contact Hours
MT 460	Microbiology I	**	4	64
MT 461	Microbiology Lab I	**	2	112
MT 472	Hematology I	** or ***	2	48
			8	224

**TO = Test Out
***IE = Individual Evaluation

(10) The Murray State University Medical Laboratory Technician Program coordinator shall provide guidance and counseling for students interested in transferring to the University of Louisville Medical Technology Program and shall make known the conditions of this agreement to students/graduates of the Medical Laboratory Technician program.

The University of Louisville shall identify a faculty member within the Medical Technology Program to serve as an advisor for transfer students. In addition the Murray State University and University of Louisville faculty members responsible for guidance and counseling will jointly develop a transfer guide sheet.

(11) If either party wishes to modify this Agreement, it is understood that students who have already transferred to the University of Louisville will have the opportunity to complete their program under the conditions of this agreement.

(12) Grievances from any party associated with or influenced by these conditions of agreement shall be made known to and addressed by the appropriate departmental and/or administrative level for discussion of implications of the grievance in order to revise/amend these conditions of agreement as decided by both programs.

(13) These conditions of agreement shall be deemed invalid without the authorizing signatures representing Murray State University and the University of Louisville.

(14) The conditions of this agreement shall be reviewed annually and revised or amended as agreed upon by both programs.

(15) Program faculty retain the right to change their curriculum and agree to inform the other program of such changes as related to the conditions of this agreement.

Areas for Cooperation

(1) A jointly planned faculty/staff development meeting will be held annually to familiarize both faculties with the provisions and conditions of the agreement.

(2) An evaluation plan will be developed to determine the success of the transfer student. The results of this evaluation shall be shared with the program coordinator at Murray State University.

I hereby accept the conditions of this agreement for transfer of credit for graduates from the Medical Laboratory Technician Associate Degree Program of Murray State University to the Medical Technology Program at the University of Louisville.

Special Assistant to the President for Health Affairs University of Louisville	Date
Medical Technology Department University of Louisville	Date
Dean, College of _____ Murray State University	Date
Medical Laboratory Technician Program Murray State University	Date

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT FROM THE WATTERSON COLLEGE ASSOCIATE DEGREE MEDICAL LABORATORY TECHNICIAN PROGRAM TO THE UNIVERSITY OF LOUISVILLE BACCALAUREATE DEGREE PROGRAM IN MEDICAL TECHNOLOGY

Conditions of Agreement for the Transfer of Credit

According to the conditions of this agreement, Medical Laboratory Technician graduates from the Watterson College Medical Laboratory Technician Program can transfer to the Medical Technology Program at the University of Louisville. These graduates will be eligible for admission to the Medical Technology Bachelor Degree Program at the University of Louisville, after

(1) receipt of two letters of recommendation from any two laboratory supervisors for whom they have worked and

(2) upon formal documentation of:

(a) completion of the Medical Laboratory Technician Associate Degree Program at the Watterson College,

(b) successful completion of the certification examination administered by ASCP, NCA or ISCLT within the past five years and

(c) work experience in a medical laboratory if more than two years have elapsed since the date of certification.

(3) Acceptable work experience shall be defined as equivalent full-time work experience in a laboratory engaged in medical laboratory testing of human beings. Further, the amount of full-time equivalent work experience required shall be in direct proportion to the amount of time elapsed since the date of certification:

Time elapsed since successful certification	Full-time equivalent work experience required
two years or less	no work experience required
more than two years but no more than three years	one year experience
more than three years but no more than four years	one and one half years experience
more than four years but no more than five years	two years experience

Applicants for whom more than five years have elapsed since certification will be treated as follows:

(4) Letters of recommendation from medical laboratory supervisors must describe the work of the applicant to the degree that an evaluation of the variety of experience as well as quality of performance may be made by the University of Louisville Faculty member responsible for this aspect of admissions;

(5) Successful completion of the Medical Laboratory Technician Associate Degree Program is defined by the current standards of the program; if requirements for graduation at either program change, the other program is to be notified in writing and the conditions of this agreement reviewed.

(6) Medical Laboratory Technician applicants will be selected for acceptance in the Medical Technology Program on a competitive basis according to the selective admissions process of the program.

(7) Students must earn a minimum of 30 hours of residence credit at the University of Louisville in addition to the professional coursework of the fourth year.

(8) University of Kentucky Community College graduates meeting requirements for admission stated in items 1-6 above shall be awarded direct transfer credit and advanced placement credit as follows:

Advanced Placement Credit

	Course	Semester Hours	Contact Hours
MT 464	Immunology - Serology I	1	16
MT 465	Immunology - Serology Lab I	0.5	28
MT 477	Clinical Chemistry Lab I	2	112
MT 481	Urinalysis Lab	0.5	28
		4	184

Additional Advanced Credit may be granted based upon the following conditions:

Course No.	Title	Condition	Semester Hours	Contact Hours
MT 460	Microbiology I	TO*	4	64
MT 461	Microbiology Lab I	TO* or I***	2	112
MT 468	Immunohematology I	TO* or PC**	1	16
MT 469	Blood Bank Lab I	TO* or PC**	1	84
MT 472	Hematology I	TO* or PC**	2	48
MT 473	Hematology Lab I	I	2	112
MT 476	Biochemistry - Urinalysis I		3	48
	Biochemistry	Waive		
	Urinalysis	TO* or I***		
			15	392

*TO = Test Out
**PC = Partial Credit
***I = Individual Evaluation

The amount of partial credit to be awarded is dependent upon _____

_____

and will be handled in the following manner: _____

_____

(9) The Watterson College Medical Laboratory Technician Program coordinator shall provide guidance and counseling for students interested in transferring to the University of Louisville Medical Technology Program and shall make known the conditions of this agreement to students/graduates of the Medical Laboratory Technician program.

The University of Louisville shall identify a faculty member within the Medical Technology Program to serve as an advisor for transfer students. In addition the Watterson College and University of Louisville faculty members responsible for guidance and counseling will jointly develop a transfer guide sheet.

(10) If either party wishes to modify this Agreement, it is understood that students who have already transferred to the University of Louisville will have the opportunity to complete their program under the conditions of this agreement.

(11) Grievances from any party associated with or influenced by these conditions of agreement shall be made known to and addressed by the appropriate departmental and/or administrative level for discussion of implications of the grievance in order to revise/amend these conditions of agreement as decided by both programs.

(12) These conditions of agreement shall be deemed invalid without the authorizing signatures representing the University of Kentucky Community College System and the University of Louisville.

(13) The conditions of this agreement shall be reviewed annually and revised or amended as agreed upon by both programs.

(14) Each program retains the right to change their curriculum and agrees to inform the other program of such changes as related to the conditions of this agreement.

Areas for Cooperation

(1) A jointly planned faculty/staff development meeting will be held annually to familiarize both faculties with the provisions and conditions of the agreement.

(2) An evaluation plan will be developed to determine the success of the transfer student. The results of this evaluation shall be shared with the Medical Laboratory Technician program coordinator at Watterson College.

I hereby accept the conditions of this agreement for transfer of credit for graduates from the Medical Laboratory Technician Associate Degree Programs of Watterson College to the Baccalaureate Degree Medical Technology Program at the University of Louisville.

Special Assistant to the President for Health Affairs University of Louisville	Date
Medical Technology Department University of Louisville	Date
President Watterson College	Date
Medical Laboratory Technician Program Watterson College	Date

CONDITIONS OF AGREEMENT FOR TRANSFER OF CREDIT AND COOPERATION BETWEEN THE MEDICAL LABORATORY TECHNICIAN PROGRAMS OF THE UNIVERSITY OF KENTUCKY COMMUNITY COLLEGE SYSTEM AND THE MEDICAL TECHNOLOGY PROGRAM AT WESTERN KENTUCKY UNIVERSITY

Conditions of Agreement for Transfer of Credit

According to the conditions of this agreement, Medical Laboratory Technician graduates from the University of Kentucky Community College System can transfer to the Medical Technology Program at Western Kentucky University.

(1) Upon formal documentation of completion of the Medical Laboratory Technician Associate Degree Program at the University of Kentucky Community College System and successful completion of the required preprofessional course work for the Medical Technology Program, these graduates will be eligible for admission to the Medical Technology Bachelor Degree Program at Western Kentucky University.

(2) Successful completion of the Medical Laboratory Technician Associate Degree Program is defined by the current standards of the program; if requirements for graduation at either program change the other program is to be notified and the conditions of this agreement reviewed.

(3) Graduates from the Medical Laboratory Technician Program shall be subject to the same admission and academic policies as all applicants to the Western Kentucky University Program.

(4) No transfer credit for professional courses (MT) will be given until the student is accepted into an approved hospital-based Medical Technology Program through the selective admissions process.

(5) If the student is admitted to the hospital-based program and the student's appropriate course work has been completed, the awarding of academic credit will be determined by the Medical Technology Coordinator of Western Kentucky University in conjunction with the Education Coordinator of the hospital-based Medical Technology Program. See Item 7 below.

(6) Students must earn a minimum of 32 hours of residence credit at Western Kentucky University to meet degree requirements. Credit hours earned while enrolled in an affiliated hospital-based Medical Technology Program will be considered residence credit. At least one-third of the academic credits in the natural-physical sciences, exclusive of credits earned in an affiliated hospital-based Medical Technology Program, must be earned in residence at Western Kentucky University.

(7) University of Kentucky Community College System graduates admitted to the Medical Technology Program at Western Kentucky University shall be awarded direct transfer credit and advanced placement credit for course work in which a grade of "C" or higher has been earned as follows:

Direct Transfer Credit

Course	Title	Hours
ENG 101	Freshman Composition	3
ENG 102	Advanced Freshman Composition	3
Math 109 + 112		5
CHE 105-107 AND CHE 115 OR	Elementary General Chemistry I & II / General Chemistry Lab	7 / 3
CHE 111-113	General College Chemistry I & II and Lab	6
BSL 110-111 OR	Anatomy and Physiology I & II	8
ANA 104 OR	Anatomy and Physiology	6
ANA 206-PGY 206	Elementary Anatomy and Elementary Physiology	6
BSL 112 OR	Elementary Medical Microbiology	4
BIO 108-109	Principles of Microbiology and Introduction Microbiology Lab	5
PY 110 OR	General Psychology	3
PY 111-112 OR	Basic Psychology I and II	6
PSY 100	Introduction to Psychology	4

Total Hours.....33-40 Hours

GENERAL EDUCATION ELECTIVES

Organization and Communication of Ideas	6 hours
Social and Behavioral Studies	6-9 hours
Natural Sciences-Mathematics	12 hours

Advanced Placement Credit

Course	Title	Hours
MLT 100 or 130	Introduction to Medical Laboratory Technician will transfer for credit for BIOL. 331 Animal Physiology Laboratory	1
MLT 120	Serology, will transfer for credit for BIOL 328 Immunology	3
MLT 220	Immunohematology	3
or MLT 230-231	Clinical Chemistry I and II will transfer for credit for General Elective	3
Total Hours		10

Dependent upon the Hospital Based Program selected by the student, the following additional credit will be granted:

St. Joseph Hospital:

Course	Title	Hours
BIOL 475	Selected Topics in Biology	8

(8) The University of Kentucky Community College Medical Laboratory Technician Program shall provide guidance and counseling for students interested in transferring to Western Kentucky University and make known the conditions of this agreement to students/graduates of the Medical Laboratory Technician Program.

Western Kentucky University shall identify a faculty member within the Medical Technology Program to serve as an advisor for transfer students. In addition, faculty members responsible for guidance and counseling will jointly develop a transfer guide sheet.

(9) If either party wishes to modify this Agreement, it is understood that students who have already transferred to Western Kentucky University will have the opportunity to complete their program under the conditions of this agreement.

(10) Grievances from any party associated with or influenced by these conditions of agreement shall be made known to and addressed by the appropriate departmental and/or administrative level for discussion of implications of the grievance in order to revise/amend these conditions of agreement as decided by both programs.

(11) These conditions of agreement shall be deemed invalid without the authorizing signatures representing the University of Kentucky Community College System and Western Kentucky University.

(12) The conditions of this agreement shall be reviewed annually and revised or amended as agreed upon by both programs.

(13) Each program retains the right to change their curriculum and agrees to inform the other program of such changes as related to the conditions of this agreement.

Areas for Cooperation

(1) A jointly planned faculty/staff development meeting will be held annually as needed to familiarize both faculties with the provisions and conditions of the agreement.

(2) An evaluation plan will be developed to determine the success of the transfer student and will be shared with the Community College System Office of the Vice President and MLT Program Coordinators.

I hereby accept the conditions of this agreement for transfer of credit for graduates from the Medical Laboratory Technician Program of the University of Kentucky Community College System to the Medical Technology Program at Western Kentucky University.

Dean of the School Western Kentucky University	Date
Department Chairman Western Kentucky University	Date
Medical Technology Coordinator Western Kentucky University	Date
Medical Technology Program Director St. Joseph Hospital	Date
Vice President University of Kentucky Community College System	Date